

HEALTHY FUTURES

Defining best practice in the recruitment and retention of
Indigenous medical students



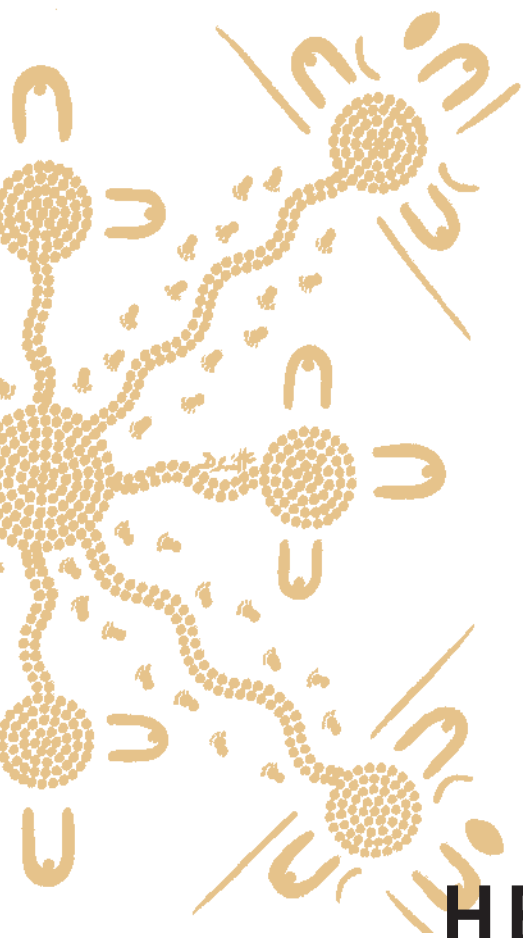


The Australian Indigenous Doctors' Association
Yaga Bagaul Dungun



Australian Government

Department of Health and Ageing



HEALTHY FUTURES

Defining best practice in the recruitment and retention of
Indigenous medical students

Ms Deanne Minniecon
Project Coordinator

Dr Kelvin Kong
Medical Officer

AUSTRALIAN INDIGENOUS DOCTORS' ASSOCIATION

AIDA Working Group

Dr Alex Brown, Ms Jane Magnus, Dr Helen Milroy, Dr Mark Wenitong, Dr Ngiare Brown, Mr Romlie Mokak, Dr Tamara Mackean

© Australian Indigenous Doctors' Association

First published in September 2005 by the Australian Indigenous Doctors' Association.

This work is copyright. It may be reproduced in whole or in part for study or training purposes, or by Aboriginal and Torres Strait Islander community organisations subject to an acknowledgement of the source and not for commercial use or sale. Reproduction for other purposes of by other organisations requires the written permission of the copyright holder(s).

ISBN 0-9758231-0-8

Additional copies of this publication can be obtained from:

The Australian Indigenous Doctors' Association

PO Box 3497 Manuka, ACT, 2603

Tel: 61 + 2 62735013 Fax: 61+ 2 62735014 Email: aida@aida.org.au

Original artwork: Mr Duncan Smith

Photography: Deanne Minniecon and Casey Eldridge. Thanks to Julie Tongs and staff at Winnunga Nimmityjah Aboriginal Health Services, ACT.

Copy editing: Themedata

Design: Themedata

Printing: Elect Printing

FOREWORD

Associate Professor Helen Milroy

First I would like to acknowledge my people, the Palyku people, in particular my grandmother and mother who taught me about health and healing through my life.

As current President of the Australian Indigenous Doctors' Association, I have great pleasure in introducing this important work. As an Indigenous medical graduate myself, I have enjoyed seeing our Indigenous medical students complete their studies and take up their place as colleagues in our health care systems.

Through researching this report, we have had the privilege of hearing many remarkable stories of Indigenous courage, strength and resolve. However, these stories have also highlighted that the strength of individuals, on their own, is not enough.

Our children must have every opportunity to achieve their dreams, fulfil their potential and contribute to the health and life outcomes for Indigenous people as well as the nation.

This can be achieved through comprehensive pathways into medicine, culturally safe and affirming student experiences, and recognition of the unique and beneficial contributions to be made as Indigenous medical practitioners.

It will however, require a real and sustained commitment with observable actions at all levels by governments, universities, medical schools, and primary and secondary education systems.

The Australian Indigenous Doctors' Association, as the sole body for Indigenous medical graduates and students in the country, promotes the pursuit of leadership, partnership and scholarship in Indigenous health. We commit to all three dimensions, both within our Indigenous world and with our non-Indigenous peers and partners in the realisation of the Best Practice Framework.

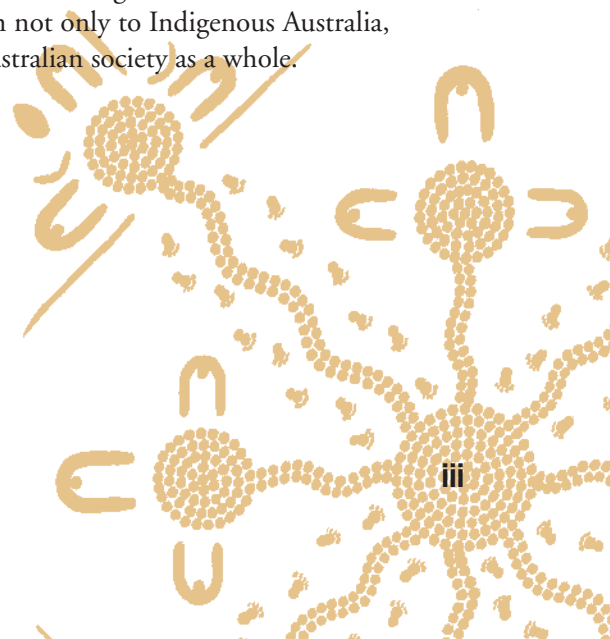
I look forward to the day when the numbers of Indigenous medical students and graduates have equitable representation across the health and education sectors. The implementation of this framework can go some way in achieving this goal.

On behalf of the Australian Indigenous Doctors' Association, I would like to sincerely thank Deanne Minnecon, Project Officer, Jane Magnus, AIDA Secretariat, and Dr Kelvin Kong for their commitment and excellent work in producing this report.

Dr Kelvin Kong

I acknowledge and thank my family, my beautiful wife, and the Worimi community for their support and belief in this project. A special thanks to Deanne Minniecon who has been instrumental in the project development and progression. I also wish to thank Jane Magnus who has dedicated a lot of her time ensuring the viability of the project. Without the assistance of these people this project would not have been successful.

This document has been the desire and passion of many students and graduates for a long time. We hope that key stakeholders (e.g. Department of Education, Science and Training [DEST], Office for Aboriginal and Torres Strait Islander Health [OATSIH], Australian medical schools; and secondary, primary and other education systems), the health workforce and wider community will rise to these challenges and fulfil their obligation not only to Indigenous Australia, but to Australian society as a whole.

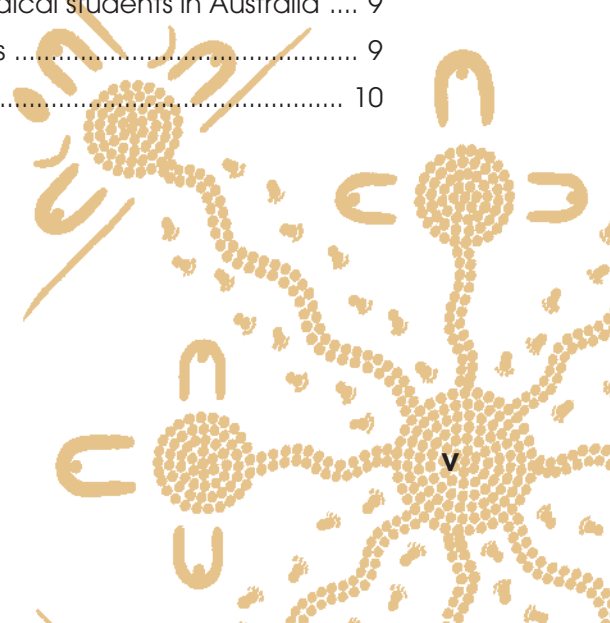


I have always had an interest in health, probably as a result of being surrounded by ill health during my upbringing in the Worimi community. As I grew older it became more obvious that it was our community being affected and not that of our non-Indigenous counterparts. I was unsure how one would ever know the answers nor the avenues to attempt to address the striking health inequalities.

I can recall the very day that cemented my interest in pursuing a medical career. I was in year 8 and participated in a careers day at university. Two of the then Indigenous students were talking about studying medicine and how, as an Indigenous person it was a realistic option. Prior to this, studying beyond year 10 was something I had never considered. These two students, now very successful doctors, Dr Louis Peachey and Dr Sandy Eades, gave me the inspiration to follow in their footsteps. As I have progressed to be where I am now, I have never forgotten my inspiration in the beginning, nor the continued support I have attained from AIDA and its membership. I am fortunate to be surrounded by a group of Indigenous over-achievers. Working on this report was a way to extend my inspiration, to give back, to assist and to encourage others as I have been.

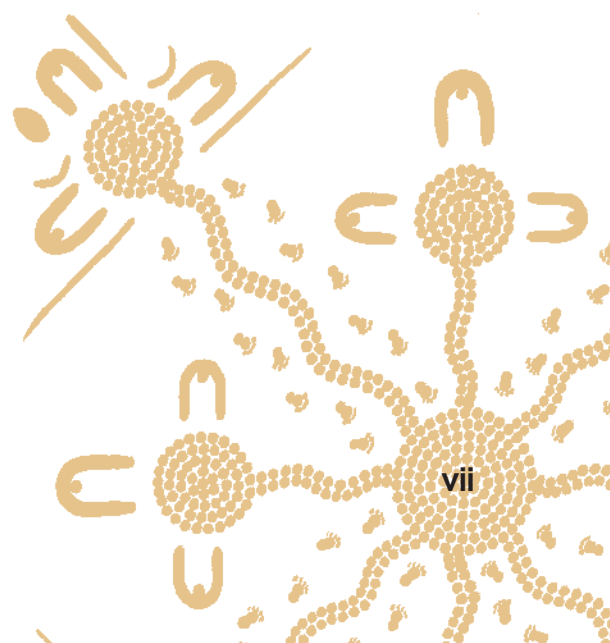
CONTENTS

Foreword	iii
Abbreviations	viii
Acknowledgments	ix
Executive summary	xi
1. INTRODUCTION	1
1.1 The Australian Indigenous Doctors' Association	1
1.2 The Best Practice Project	2
2. METHODOLOGY	3
2.1 Methods	3
2.1.1 Literature review	3
2.1.2 Surveys	3
2.1.3 Unstructured interviews	4
2.1.4 National workshop	4
2.2 Study limitations	5
3. LITERATURE REVIEW	6
3.1 Indigenous education	6
3.1.1 The early years	6
3.1.2 Barriers to education	6
3.1.3 Higher education	6
3.2 Indigenous health workforce	8
3.2.1 National Strategic Framework for Aboriginal and Torres Strait Islander Health	8
3.2.2 Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework	8
3.4 Recruitment and retention of Indigenous medical students in Australia	9
3.4.1 Barriers for Indigenous medical students	9
3.4.2 Recruitment and retention studies	10



3.5 Recruitment and retention of Indigenous medical students in comparative countries	12
3.5.1 New Zealand	12
3.5.2 United States of America	14
3.5.3 Canada	16
3.6 Australian Indigenous doctor and medical student numbers	17
4. FINDINGS	18
4.1 Indigenous doctors and why they pursue medicine	18
4.1.1 Indigenous medical student and doctor numbers	18
4.1.2 Reasons for pursuing and staying in medicine	19
4.2 Existing Indigenous recruitment and retention strategies in Australia	19
4.3 Themes in relation to best practice	21
4.3.1 Personal contact and community engagement	22
4.3.2 School and university visits	23
4.3.3. Indigenous health support units	24
4.3.4 Indigenous medical school staff	26
4.3.5 Mentoring	27
4.3.6 Indigenous content in medical curriculum	28
4.3.7 Cultural safety	29
4.4 Other themes in relation to recruitment and retention	30
4.4.1 Promotion	30
4.5 Admissions	32
4.5.1 Alternative entry schemes	32
4.5.2 Quotas for Indigenous medical students	33
4.5.3 GAMSAT and UMAT	33
4.5.4 Identification	35
4.6 Support	35
4.6.1 Finances	35
4.6.2 Scholarships	36
4.6.3 Tutorial assistance	37
4.6.4 Collegiate support	38
4.6.5 Career progression and development	39
4.6 LIME Connection statement of outcomes and intent	40

5. DISCUSSION	41
5.1 Approaches in Australia and other comparative countries	41
5.1.1 Targets and affirmative action	41
5.2 Gaps and barriers in the current strategies and ways forward	42
5.2.1 Promoting medical degrees to Indigenous people	43
5.2.2 Enabling pathways for Indigenous people into medicine	45
5.2.3 Appropriately supporting Indigenous people in medicine	46
5.3 Recruitment and retention of Indigenous medical students is everybody's business	47
5.4 Summary	50
6. FRAMEWORK	51
6.1 Headline targets	51
6.2 Principles	53
ATTACHMENT A	55
References	63
Endnotes	68



ABBREVIATIONS

ABS	Australian Bureau of Statistics	LIME	Leaders in Indigenous Medical Education
AEP	National Aboriginal and Torres Strait Islander Education Policy	MAPAS	Maori and Pacific Island Admissions Scheme
AIDA	Australian Indigenous Doctors Association	NAHS	National Aboriginal Health Strategy
AIHW	Australian Institute of Health and Welfare	NAIDOC	National Aboriginal and Islander Day Observance Committee
AMA	Australian Medical Association	NSFATSIH	National Strategic Framework for Aboriginal and Torres Strait Islander Health
AMC	Australian Medical Council	NOMS	Northern Ontario Medical School
AMS	Aboriginal Medical Services	OATSIH	Office for Aboriginal and Torres Strait Islander Health
AMWAC	Australian Medical Workforce Advisory Committee	UBC	University of British Columbia
CDAMS	Committee of Deans of Australian Medical Schools	UMAT	Undergraduate Medicine and Health Sciences Admission Test
CPMC	Committee of Presidents of Medical Colleges		
CPMEC	Confederation of Postgraduate Medical Education Committee		
DEST	Department of Education, Science and Training		
GAMSAT	Graduate Australian Medical School Admissions Test		
HEC	Higher Education Contribution Scheme		
INMED	Indians into Medicine		
ISU	Indigenous (student) support unit		
ITAS	Indigenous Tutorial Assistance Scheme		
KRA	Key Result Area		



ACKNOWLEDGMENTS

The Australian Indigenous Doctors Association wish to thank the many Aboriginal and Torres Strait Islander medical students and graduates who participated in this study, as well as the Medical Faculties and schools, and Indigenous support units and staff for allowing us to visit and for sharing information with us so willingly and openly.

We would also like to pay our respects to and acknowledge the Aboriginal and Torres Strait Islander community as well as the general medical community for their support and guidance throughout the life of the project.

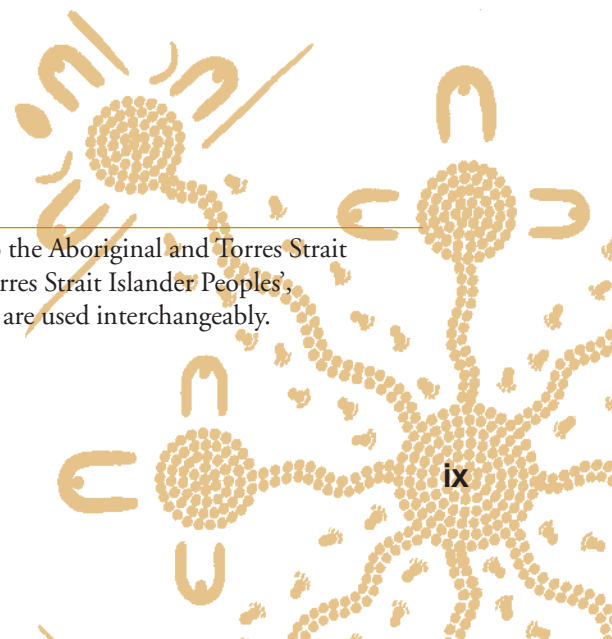
We want to give a special thanks to the Committee of Deans of Australian Medical Schools for their assistance and support during the project and for the opportunity to work collaboratively for the duration of this project. AIDA hopes to continue this invaluable working relationship in the future.

Thank you also to Mr Duncan Smith for allowing us to use his artwork throughout the document.

Finally, we wish to acknowledge and thank the Australian Government Department of Health and Ageing, Office for Aboriginal and Torres Strait Islander Health for providing funding for this critical project.

Without the support from these groups, this project would not have been possible.

* In this document, we use the term 'Indigenous' to refer to the Aboriginal and Torres Strait Islander People of Australia. The terms 'Aboriginal and Torres Strait Islander Peoples', 'Indigenous', 'First Australian' and 'Indigenous Australian' are used interchangeably.



EXECUTIVE SUMMARY

It is well known that the most disadvantaged group in Australia are Indigenous people. Indigenous Australians overall have poorer physical and mental health, are less likely to complete primary, secondary and tertiary education and do not have the same employment opportunities as non-Indigenous Australians. They are also dealing with the compounding impact of multigenerational grief, loss and trauma related to colonisation, the stolen generation, racism and discrimination, and cultural dislocation on a daily basis.¹

In relation to medicine, the positive effects of Indigenous doctors for Indigenous people's physical, emotional and cultural wellbeing have long been recognised by government and other Indigenous and non-Indigenous stakeholders.²

More Indigenous doctors are needed. According to the Australian Institute of Health and Welfare (AIHW) 2003, there were 90 Indigenous Australian doctors compared to 48 119 registered doctors in Australia overall in 2001.³ This indicates that Indigenous doctors account for 0.18% of the medical profession, despite 2.4% of the Australian population being Indigenous.⁴ According to the Department of Education, Science and Training (DEST), there were 102 Indigenous students enrolled in medicine in 2003. This is compared the Committee of Deans of Australian Medical Schools (CDAMS) data which indicates there are 9233 domestic and international students currently enrolled in medicine in Australia overall.⁵ These figures indicate that Indigenous medical students still only make up 1.1% of the medical student population.

The Australian Medical Association (AMA) commissioned Access Economics to undertake a study on the Indigenous health workforce in 2004.⁶ The Australian Medical Association (AMA) 2004 Discussion Paper *Healing Hands*

– *Healing Hands: Aboriginal and Torres Strait Islander Workforce Requirements,*

... the AMA believes that to improve the health of Aboriginal peoples and Torres Strait Islanders it is critical to increase the proportional representation of this group employed within the general health workforce. To increase the proportion of Aboriginal peoples and Torres Strait Islanders working as health professionals to non-Indigenous levels 928 doctors ... need to be trained.⁷

According to the AMA, to fill the gap in 10 entry years, fifty Indigenous students would need to enrol in medical schools across Australia each year for the next four years and then one hundred would need to enrol each year after that. This would mean that each medical school in Australia would need to enrol three Indigenous students each year for the first four years and seven each year after that.⁸

Medical schools with the greatest number of Indigenous medical students identified a comprehensive approach including: locally based strategies; building relationships with potential students, families and communities; Indigenous medical or health support units; Indigenous staff; and university and school visits, as the most important elements to their success. Mentoring, curriculum and cultural safety were also identified by staff, medical students and graduates as integral to best practice. However, they said that not all of these elements were currently being implemented effectively. The findings indicate that the themes in relation to best practice are:

- personal contact and community engagement;
- university and school visits;
- Indigenous health support units;
- Indigenous staff;

- mentoring;
- curriculum; and
- cultural safety.

The Best Practice Project findings support the evidence that there is a severe shortage of Indigenous doctors in Australia and show there has been no growth in Indigenous medical student numbers since 2003.

It is clear that Australian medical schools are not recruiting enough Indigenous students into medicine and retaining them. According to the literature, prior educational and other disadvantages severely impact on Indigenous students' opportunities to successfully apply for medicine. However, the findings indicate that some medical schools are significantly more successful at recruiting and retaining Indigenous medical students, even given these disadvantages. Successful recruitment and retention approaches can also be found in other comparative countries such as New Zealand, the USA and Canada.⁹

It is apparent that many national, state and institutional policies and strategies said to assist Indigenous people have failed. This is evident in the fact that the gap in mortality rates between Indigenous and non-Indigenous Australians remains at 20 years while in other comparative countries it has significantly fallen.¹⁰ As noted in the CDAMS Indigenous Health Curriculum Framework 'there is a convincing case that the health and wellbeing of Indigenous people in Canada, the USA and New Zealand is strengthened by having their sovereignty recognised and having control over their own health care service delivery.'¹¹ Australian governments and medical schools need to seriously consider what these observations mean for the success of Indigenous medical student recruitment and retention strategies. The Best Practice Project therefore provides Australian governments and medical schools with a framework, including targets, principles and actions, that will assist in this process.

Headline targets

By 2010:

- Australian medical schools will have established specific pathways into medicine for Indigenous Australians
- CDAMS Indigenous Health Curriculum Framework will be fully implemented by Australian medical schools
- There will be 350 extra Indigenous students enrolled in medicine¹²

Principle 1

All Australian medical schools and principal stakeholders have a social responsibility to articulate and implement their commitment to improving Indigenous health and education; and must

Principle 2

Make the recruitment and retention of Indigenous medical students a priority for all staff and students and show leadership to the wider university community

Principle 3

Ensure cultural safety and value and engage Indigenous people in medical school business

Principle 4

Adopt strategies, initiate and coordinate partnerships that open pathways to medicine from early childhood through to vocational training and specialty practice

Principle 5

Ensure all strategies for Indigenous medical student recruitment and retention are comprehensive, long term, sustainable, well resourced, integrative and evaluated

1. INTRODUCTION

It is well known that Indigenous people are the most disadvantaged group in Australia. Overall, they have poorer physical and mental health; are less likely to complete primary, secondary and tertiary education; and do not have the same employment opportunities as non-Indigenous Australians. They are also dealing with the compounding impact of multigenerational grief, loss and trauma related to colonisation, the stolen generation, racism and discrimination, and cultural dislocation on a daily basis.¹³

Indigenous Australians are also dying at a much younger age than either non-Indigenous Australians or Indigenous people in other first world countries. The life expectancy gap between Indigenous and non-Indigenous Australians remains at twenty years. In comparison, the life expectancy gap in Canada, New Zealand and the USA has fallen to between five and seven years.²⁴

For both state and national Australian governments, the question remains: why do Indigenous Australians continue to live in such extreme comparative disadvantage with widening disparities, despite government policies and strategies aimed at eliminating such disadvantage? More importantly, what can we all, Indigenous and non-Indigenous, do about it?

In relation to medicine, the positive effects of Indigenous doctors for Indigenous people's physical, emotional and cultural wellbeing have long been recognised by government and other Indigenous and non-Indigenous stakeholders.¹⁵ Clearly, more Indigenous doctors are needed. According to the Australian Medical Association (AMA), 928 Indigenous doctors need to be trained immediately to reach workforce levels proportionate to that of non-Indigenous doctors to population ratios.¹⁶

Current government and university policies relevant to Indigenous medical students include allocated places for Indigenous students, alternative entry options and Indigenous (student) support units (ISU). Yet, most Australian medical schools still struggle to recruit and retain Indigenous students, and allocated Indigenous medical student places may be filled by other students.

To better understand this, the Australian Indigenous Doctors' Association (AIDA) were supported by the Australian Government Department of Health and Ageing through the Office of Aboriginal and Torres Strait Islander Health (OATSIH) to research and report on best practice in the recruitment and retention of Indigenous medical students.

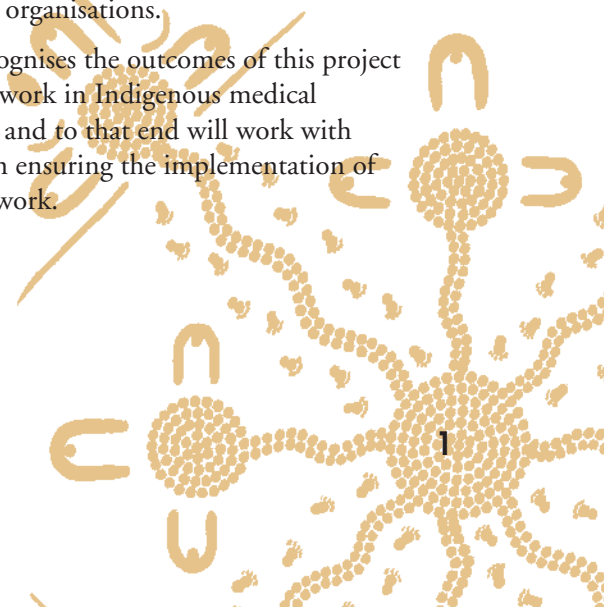
This project has become known as the *Healthy Futures* Best Practice Project.

1.1 The Australian Indigenous Doctors' Association

The Australian Indigenous Doctors' Association (AIDA) is the leading organisation for Indigenous medical workforce issues and through this project confirms its commitment to leadership and innovation in this area.

AIDA provides collegiate and professional development support to Indigenous medical graduates and undergraduates. It strives to develop and maintain strong working partnerships with Australian medical schools, medical colleges, and key health and education organisations.

AIDA recognises the outcomes of this project as critical work in Indigenous medical education and to that end will work with partners in ensuring the implementation of the framework.



1.2 The Best Practice Project

The aim of the Best Practice Project is to assist Australian medical schools, governments and other stakeholders in their efforts to support more Indigenous Australians in commencing and completing medical degrees.

Project objectives

- Report on current numbers of Aboriginal and Torres Strait Islander doctors and medical students and identify factors that encouraged them to pursue a career in medicine.
- Identify, collate and report on existing recruitment, retention and graduation strategies at Medical Faculties throughout Australia and include an audit of Indigenous support units within the faculties and their existing initiatives. Where possible, this work will take account of any other recent studies undertaken in this area and will not duplicate results.
- Liaise and collaborate with Committee of Deans of Australian Medical Schools (CDAMS) to produce information and recommendations that complement the work of the CDAMS Indigenous Health Curriculum Project.
- Develop guidelines for mentorship of Indigenous students. This shall include research on how other countries have succeeded in recruiting and supporting Indigenous students to graduation and compare experiences in New Zealand, Canada, the USA and other Pacific countries.
- Organise a workshop to present and discuss the draft report of the project to key stakeholders.
- Identify resources required to ensure medical schools adopt recruitment/retention/graduation strategies and mentorship programs.

Intended outcomes

- Development of recommendations on best practice models for recruitment, retention and graduation of Indigenous students in medicine.
- Development of best practice models for support units within medical schools.
- Development of best practice models for cultural safety for Indigenous medical students.
- Identification of appropriate models for mentorship.
- Resourcing of models of best practice for recruitment, retention and graduation; mentorship; cultural safety; and other issues as identified.
- Identification of key stakeholders to work collaboratively in implementing project recommendations.



2. METHODOLOGY

The Best Practice Project draws on both quantitative and qualitative methodology:

- assessment of quantitative data was used as a basis for assessing gaps in current recruitment and retention strategies and as a platform for setting targets; while
- the qualitative data provides a way of deriving meaning and the 'lived experience' of Indigenous medical students in order to better understand the context within which the targets and principles will ideally be achieved.

2.1 Methods

The methods used to gather and discuss findings relevant to the recruitment and retention of Indigenous medical students and the project objectives and outcomes included:

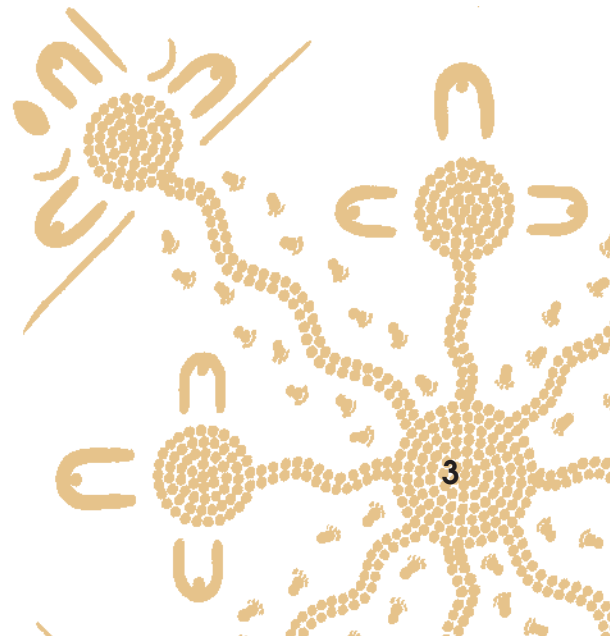
- a review of the literature;
- development and dissemination of surveys to Australian medical schools through Indigenous medical student support workers, Indigenous medical graduates, and Indigenous medical students;
- unstructured interviews; and
- convening of a national workshop.

2.1.1 Literature review

National and international literature relevant to the recruitment and retention of Indigenous medical students was reviewed. The literature review was conducted between July 2004 to January 2005. Material was sourced from MEDLINE and PROQUEST databases, a library search, government documents, internet searches and unpublished reports. Search terms included: 'recruitment', 'retention', 'support', 'Indigenous', 'Aboriginal', 'Torres Strait Islander', 'Black', 'medical student', 'Indigenous education' and 'Indigenous health'.

2.1.2 Surveys

Surveys were developed by AIDA with reference to information identified during the literature review. Questions targeted Indigenous medical students, graduates and medical schools (see Attachment A for surveys). They were distributed to 15 accredited Australian medical schools, two of which are privately funded. Thirty surveys were distributed to Indigenous medical students, and another 30 were distributed to Indigenous medical graduates. The AIDA membership database was used to identify potential student and graduate participants for the surveys. Where possible, this was cross-referenced with student and graduate databases from the Indigenous support units of medical schools across Australia. Fourteen of the 15 medical schools, 15 of the 30 medical students and 17 of the 30 medical graduates completed and returned the surveys, representing 93%, 50% and 57% participation rates respectively.



2.1.3 Unstructured interviews

Unstructured interviews were conducted with thirteen of the fifteen Deans of Australian medical schools. Major aims were to:

- introduce the project and surveys;
- encourage support and leadership in relation to issues specific to recruitment and retention of Indigenous students in medical schools; and
- discuss and invite involvement of the Deans at a national workshop.

Discussions with some Deans also extended to issues relating to the recruitment and retention of Indigenous medical students and in particular promotional and supporting activities, resources, Indigenous support units, and Indigenous staff.

Unstructured interviews were also conducted with Indigenous and non-Indigenous university staff, and Indigenous medical students and graduates. The main reason for these interviews was to engage key stakeholders and current or previous students in exploring the key drivers and determinants of successful pathways throughout medical school in a comfortable and non-threatening manner. The interviews recorded information based on participant-driven narratives and dialogues outlining their own or witnessed experience of medical training and the context in which it was conducted. Major themes included discussion of challenges and successes, support needs, gaps and barriers, views on medical schools, views on recruitment and retention, and lived experiences of being an Indigenous medical student.

All interviews were conducted by the senior author of the project. All qualitative interview data was recorded by hand, expanded and transcribed, and then analysed in order to identify major themes.

2.1.4 National workshop

A national workshop—the Leaders In Medical Education (LIME) Connection—was held in Perth on 8–10 June 2005 and was co-hosted by CDAMS and AIDA. The aim of the workshop was for CDAMS to present the Indigenous Health Curriculum Framework and AIDA to present the initial findings of the Best Practice Project in order to encourage discussion and feedback from workshop participants. Key stakeholders in Indigenous medical education and Indigenous medical student recruitment and retention in Australia and New Zealand also made presentations. Participants were encouraged to discuss and feed back on Indigenous medical curricula and recruitment and retention issues in ‘dynamic sessions’ that were recorded and then presented back to the workshop as a whole. Through this process, initial outcomes were identified and agreed by all workshop participants. Attendees at the LIME Connection included:

- Deans of seven medical schools;
- medical and university recruitment, retention and development staff;
- Indigenous doctors, students and other health professionals;
- representatives from the University of Otago, New Zealand;
- representatives from two Medical Colleges;
- postgraduate Medical Council representative;
- Australian state and national government representatives from OATSIH and DEST; and
- local community-controlled Aboriginal medical services representatives.

The initial outcomes of the LIME Connection focused on implementation, resourcing, partnerships and capacity issues in relation to Indigenous medical education and the recruitment and retention of Indigenous medical students. Final outcomes and intents of the LIME Connection are included in the Findings section of this book (see p. 40).

2.2 Study limitations

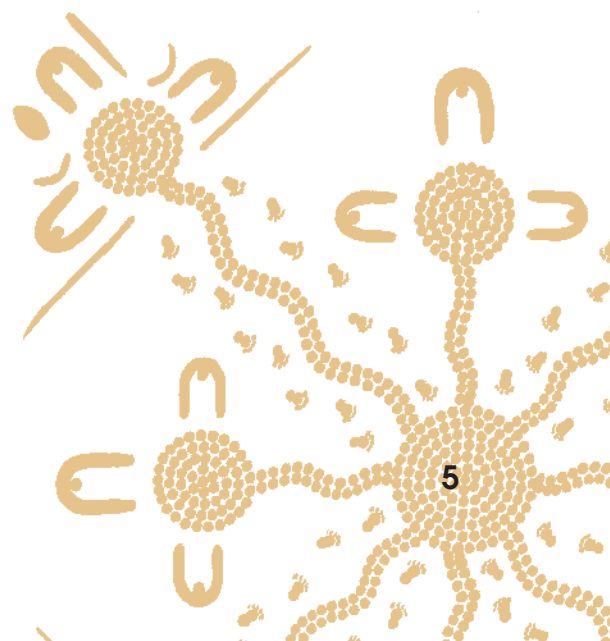
Study limitations are related to difficulties identifying the target group, students who did not complete their degree course and participation rates.

Data on the number of Indigenous medical students and graduates may be misrepresented since it was difficult to estimate the total study population from which to draw participants:

- Indigenous people may choose not to identify as Indigenous for a number of reasons;
- students and graduates are a mobile population;
- cross-referencing to the AIDA database only identified AIDA members rather than the entire target group; and
- not all state and territory medical registration authorities maintain Aboriginal or Torres Strait Islander identifiers.

Reasons why some of the target group chose not to participate in this project include busy schedules and hesitancy to divulge experience of difficulties in relation to social, financial and academic issues.

Students who had withdrawn or did not complete their medical degree were not included. Unfortunately, few resources were available for identifying this difficult-to-find target group. In essence, non-inclusion of this group may well bias the reports findings toward the experience of those who were able to negotiate and complete their medical studies. Inclusion of the factors that contributed to non-completion is clearly an important target for further exploration of the context of the recruitment, retention and graduation of Indigenous medical students.



3. LITERATURE REVIEW

3.1 Indigenous education

Indigenous students continue to be the most educationally disadvantaged student group in Australia.¹⁷ The 2003 *Overcoming Indigenous Disadvantage Key Indicators Report*,¹⁸ indicates that:

- national school participation rates for Indigenous five year olds in 2002 was only 10.1%;
- Indigenous primary school students have significantly lower literacy and numeracy achievement than non-Indigenous students;
- Indigenous secondary students are less likely to complete compulsory schooling than non-Indigenous students;
- poor health impacts on school attendance; and
- there is a strong correlation between low income families and lower scores in learning outcomes.

3.1.1 The early years

The impact of educational disadvantage on students during the early years of schooling is manifested in learning difficulties, constant experience of failure, alienation from teachers and peers, dropping out of school and difficulty attaining higher education and gaining employment.¹⁹

*Ensuring that Indigenous children begin formal learning as early as possible, are less absent from school, and are safe, healthy and supported by their family and community will go a long way to improving educational outcomes.*²⁰

Steering Committee of the *Overcoming Indigenous Disadvantage Report*

3.1.2 Barriers to education

The *Queensland School Curriculum Council*, 2002²¹ identified a number of barriers affecting Indigenous student participation and engagement in education (see Table 1), including:

- isolation, alienation and marginalisation;
- language and cultural barriers;
- health and wellbeing;
- socioeconomic circumstances and access to resources and public services;
- racism and prejudice; and
- employment opportunities.

3.1.3 Higher education

Only 12.5% of the Indigenous population aged 15 years and over have attained post-secondary qualifications, compared to 33.5% of the non-Indigenous population.²²

Indigenous people are also much more likely to attend a technical or further educational college, including TAFE colleges than a university. The types of courses they undertake are also more likely to be enabling and non-award courses, rather than postgraduate courses. Indigenous students also have a harder time completing their studies and attaining qualifications than non-Indigenous students.²³



Table 1. Barriers affecting Indigenous student participation and engagement in education.

Isolation, alienation and marginalisation

- Influence of distance, socio-cultural and geographic isolation on Indigenous students participation in school

Language and cultural barriers

- The interest and relevance of curriculum and test materials for Indigenous students
- Understanding of Indigenous cultures (including staff and students)
- Cultural identity and linguistic backgrounds of Indigenous students, their families and communities
- Incorporation and recognition of ways of knowing and learning styles of Indigenous students
- Accessibility of information and ideas, to Indigenous people for whom standard Australian English is not their first language
- Community decision-making processes.

Health and wellbeing

- Influence of violence on students participation in school
- Influence of health factors (particularly hearing impairment) on students' participation in school

Socioeconomic circumstances and access to resources and public services

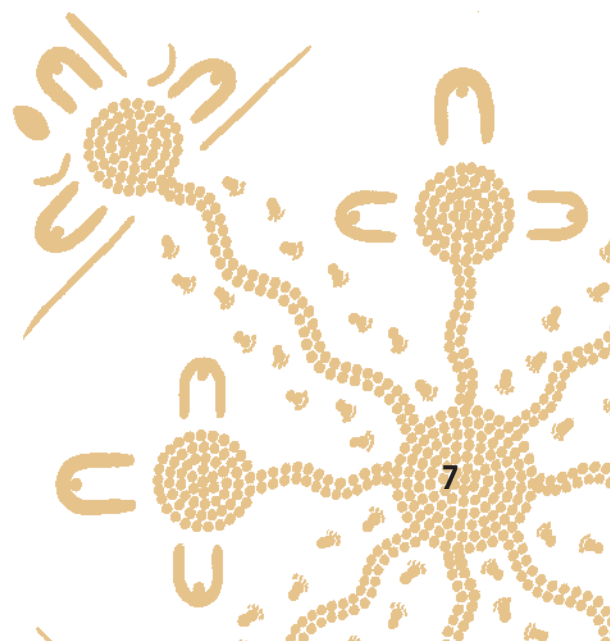
- Appropriateness of resources for Indigenous students
- Equity of access to and availability of resources

Racism and prejudice

- Inclusiveness and cultural appropriateness of assessment frameworks for Indigenous students
- How learning is valued
- Racism and prejudice in schools towards Indigenous students
- Involvement of community members, parents and carers

Employment opportunities

- Influence of employment opportunities on Indigenous students' participation in school
-



3.2 Indigenous health workforce

The Standing Committee on Aboriginal and Torres Strait Islander Health developed the Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework in May 2002 to

*... transform and consolidate the workforce in Aboriginal and Torres Strait Islander health to achieve a competent health workforce with appropriate clinical, management, community development and cultural skills to address the health needs of Aboriginal and Torres Strait Islander peoples supported by appropriate training, supply, recruitment and retention strategies.*²⁴

Following this, the National Aboriginal and Torres Strait Islander Health Council prepared the National Strategic Framework for Aboriginal and Torres Strait Islander Health (NSFATSIH) in July 2003 as a framework for action by governments.

3.2.1 National Strategic Framework for Aboriginal and Torres Strait Islander Health

The goal of the NSFATSIH is:

*To ensure that Aboriginal and Torres Strait Islander peoples enjoy a healthy life equal to that of the general population that is enriched by a strong living culture, dignity and justice.*²⁵

The framework identifies nine key result areas (KRA). KRA 3 (a competent health workforce) recognises that

*... a competent health workforce is integral to ensuring that the health system has the capacity to address the health needs of Aboriginal and Torres Strait Islander people.*²⁶

The objective of KRA 3 is:

*A competent health workforce with appropriate clinical, management, community development and cultural skills to address the health needs of Aboriginal and Torres Strait Islander people supported by appropriate training, supply, recruitment and retention strategies.*²⁷

KRA action areas are based on the implementation of the Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework.

3.2.2 Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework

The Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework is based on the nine principles consistent with the 1989 National Aboriginal Health Strategy (NAHS):

- cultural respect;
- a holistic approach;
- health sector responsibility;
- community control of primary health care services;
- working together;
- localised decision making;
- promoting good health;
- building the capacity of health services and communities.

The framework identifies five objectives.

Objectives 1 and 4 directly relate to Aboriginal and Torres Strait Islander medical workforce issues:

Objective 1: to increase the numbers of Aboriginal and Torres Strait Islander people working across all the health professions; and

*Objective 4: to improve the effectiveness of training, recruitment and retention measures targeting both non-Indigenous Australian and Indigenous Australian health staff working within Aboriginal primary health care.*²⁸



3.4 Recruitment and retention of Indigenous medical students in Australia

Very little literature has been published on the recruitment and retention of Indigenous medical students in Australia. Information that is available, is mainly found in articles and reports concerned with wider Indigenous and often mainstream medical, health, education and workforce issues or in-house publications of individual universities.

Gail Garvey from the University of Newcastle has produced a number of papers on Indigenous medical student recruitment, retention and curriculum issues in Australia. Her work includes:

- Garvey G, Brown N. *Project of National Significance Final Report: Aboriginal Health A Priority for Australian Medical Schools*. 1999a.²⁹
- Garvey G, Rolfe E, Pearson S. *Agents for social change: the University of Newcastle's Role in Graduating Australian Aboriginal Doctors*. 2000.³⁰
- Garvey G, Atkinson D. *What can medical schools contribute to improving Aboriginal health*. 1999b.³¹

Garvey (1999a) notes in the *Project of National Significance Final Report: Aboriginal Health A Priority for Australian Medical Schools* that

*...universities exist in partnership with a variety of organisations including schools and local communities that can work towards reconciliation. The responsibility is far reaching and is much more than simply graduating competent and caring doctors. While medical schools cannot single-handedly compensate Australia's racist history or for the inequitable representation in society of Australia's 'minority' doctors, they can choose to act as agents for social change through a variety of academic means, including admissions policies and curricula reform.*³²

3.4.1 Barriers for Indigenous medical students

In a 2002 *Rural Practice* article on Indigenous people becoming doctors and the obstacles facing them, Garvey is quoted as saying that

*... Aboriginal and Torres Strait Islander people face many obstacles in obtaining similar educational outcomes as their non-Aboriginal counterparts ... this is particularly so for health programs, including medicine.*³³

In this article, Garvey also states that factors that may be obstacles to the recruitment and retention of Indigenous medical students include:

- unfamiliarity with the roles and responsibilities of health professionals, partly as a result of the limited number of Indigenous health professionals within communities;
- levels of academic achievement that are consistently lower compared with the general student population;
- insufficient information regarding entry in to medicine including university courses and alternative entry programs;
- acceptance by medical school communities for those who have been accepted under alternative entry programs;
- impacts on family responsibilities of mature age student usually;
- impacts on family and community obligations and responsibilities from leaving family and community to study;
- isolation within university and from family and community;
- learning to adapt to academic and structured language patterns of medicine;
- lack of recognition of Indigenous people and cultures within curricula;
- dealing with discrimination and stereotyping;

- financial support; and
- pressure to go back and practice only in Indigenous communities or organisations both from their own community and the wider community.

3.4.2 Recruitment and retention studies

Various studies and publications have been undertaken by universities, individuals and government agencies on the recruitment and retention of Indigenous medical students.

Newcastle University

A report on the characteristics of students entering Australian medical schools by the Australian Medical Workforce Advisory Committee (AMWAC) in 1997³⁴ briefly considered the recruitment and retention activities currently being undertaken by a number of Australian medical schools. The committee identified Newcastle University as having the most comprehensive and effective approach through its course promotion

activities, culturally appropriate admission procedures and Supportive learning environment (see Table 2).

Indigenous students in Queensland

A 2000 Queensland study on the role of tertiary education in strengthening Indigenous health by Williams and Cadet-James³⁶ found that a number of factors influence participation and retention outcomes for Indigenous students including that:

- potential students are concerned that their level of education is insufficient to allow them to undertake or sustain tertiary study;
- family and community support may be forthcoming only if they are able to perceive benefits of the study for the students and the community and the education process; and
- the support by fellow students both during and after completion of study.

Table 2. Approach by Newcastle University to recruitment and retention of Indigenous students.

Course promotion activities

- Promotion of courses by academic staff, Indigenous students and graduates at schools and to Indigenous communities and Indigenous community health organisations
- Advertising of courses nationally through relevant media, including Koori mail and radio programs
- Provision of career development days with Indigenous students and graduates participating
- Documentation about admission procedures and the Indigenous Liaison Office in faculty promotion material and the University Admission Centre guide

Culturally appropriate admission procedures

- Processes that are consultative to ensure that students receive family and community support as well as support from the local Indigenous communities
- Broadly defined eligibility criteria that takes into account prior disadvantage
- Rigorous application of final selection criteria, conducted over three days and based on:
 - a briefing session followed by the Undergraduate Medicine and Health Sciences Admission Test (UMAT);
 - a community-based interview; and
 - a structured interview and assessment

Supportive learning environment

- A learning environment that provides teaching and research about Indigenous health issues.³⁵
-

The report recommended that:

- tertiary institutions consider developing courses that can be structured to enable the incremental development of students' skills.
- whenever possible, educational activities should take place within the community;
- tertiary institutions adapt admission criteria and educational strategies to reflect educational opportunities, both formal and informal, Indigenous and non-Indigenous, available in students' communities; and
- teaching institutions foster the development and maintenance of the student community and facilitate its continuing function as a past students' support network.³⁷

Recommendations from this study were based on the conclusion that recruitment and retention must involve a range of activities addressing the holistic needs of the student.

No shame job

No Shame Job, by Adams (1999) is an easy-to-read booklet aimed at encouraging Indigenous people to pursue a career in health.³⁸ It contains stories and messages from students enrolled in health degrees.

*The objective for putting this booklet together is to encourage other young Indigenous people to choose a career in health to show that there are many ways to reach you goals and that there is plenty of information, places to study and people to give you advice and direction.*³⁹

Kiarna Adams is an Indigenous medical student at the Centre for Aboriginal Medical and Dental Health at the University of Western Australia, a 2001 member of the National Youth Roundtable and the AIDA Board 2004/05 Student Representative. *No Shame Job* demystifies the process of applying

to university and other tertiary institutions, addresses common questions and concerns raised by potential applicants and addresses issues such as:

- career choices in health;
- ways to reach your goals;
- educational and study concerns;
- institutional expectations; and
- housing and financial assistance.

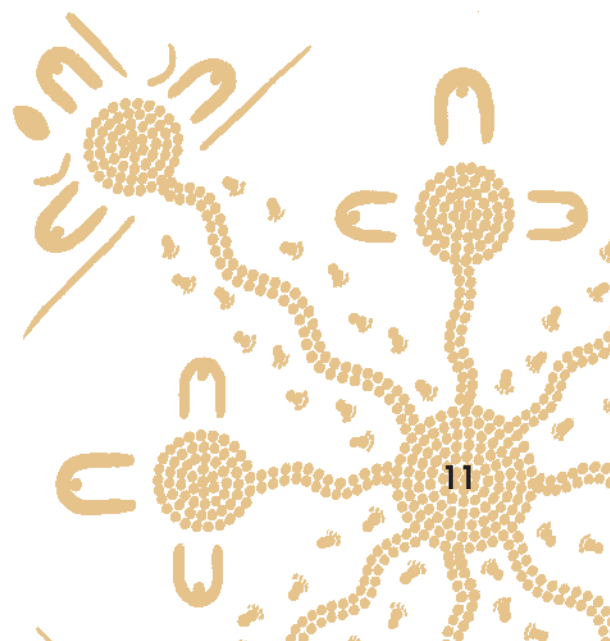
Aboriginal and Torres Strait Islander Education Policy

The Australian Government Aboriginal and Torres Strait Islander Education Policy (AEP) plays a role in efforts to increase the recruitment and retention of Indigenous medical students.⁴⁰ The higher education institutions' Indigenous Education Statements state that improving access for Indigenous students is imperative, and that

*... issues such as disadvantaged backgrounds, remoteness, financial constraints and alienation form the education sector need to be overcome to ensure adequate access for Indigenous students.*⁴¹

Institutions have devised varying programs and initiatives to improve access in their respective institution. Some examples of programs include:

- alternative entry programs;
- outreach programs;
- scholarships; and
- alternative delivery modes.



3.5 Recruitment and retention of Indigenous medical students in comparative countries

A considerable amount of literature is available on the recruitment and retention of Indigenous medical students in comparative countries and only a summary of these findings are presented. The studies and publications from New Zealand, the USA and Canada considered in this report include:

- New Zealand: *Maori Participation in Tertiary Education*, by Jefferies, 1999⁴²; *Training Needs Analysis for Maori Medical Students* by Robbins and Tamatea, 2001⁴³, *Maori and Pacific Admissions Scheme*, Te Kupenga Hauora Maori and Pacific Health Website, 2005⁴⁴; and literature from the University of Auckland, website including the *Vision 2020 Strategy*.
- United States: *Preparing the Workforce for the Twenty First Century* (Project 3000 by 2000) by Ready, 1994⁴⁵; *Indians into Medicine* (INMED) program from University of North Dakota, 2004⁴⁶, and; literature from the American Medical Association⁴⁷ and Indian Health Service⁴⁸.
- Canada: *Aboriginal Health Care Careers Program*, University of Alberta, 2005⁴⁹; *Northern medical school prioritises aboriginal health*, by Crump, 2004⁵⁰; *5% of Enrolment spots should be filled by Natives*, by Haley, 2001⁵¹, and; literature from the University of British Columbia (UBC)⁵², and the Northern Ontario Medical School (NOMS)⁵³.

3.5.1 New Zealand

New Zealand studies highlight low retention and success rates by Maori in tertiary education and aim to identify solutions to overcome potential barriers. According to the literature, Maori doctors made up 2.7% of the medical workforce in New Zealand in 2003 and Pacific Island doctors made up 1.1% in 2001.⁵⁴ Maori and Pacific Island medical

students made up 7.5% and 2.9% of overall medical enrolments in 2004. Maori and Pacific Island numbers have increased significantly in recent years and it is estimated that the number of Maori and Pacific Island medical practitioners will increase by 18% and 35% respectively in by 2005.⁵⁵

Maori Participation in Tertiary Education

A study on Maori participation in tertiary education by Jefferies, 1999,⁵⁶ identified short- and long-term solutions to the lack of Maori doctors in New Zealand. Short-term strategies include

- affirmative action programs;
- bridging and enabling; and
- students loans.

Long-term strategies include:

- improving overall education outcomes;
- changes to career delivery advice;
- improving the home environment; and
- influencing teachers' expectations and attitudes.

A study by Robbins and Tamatea, 2001, on training needs analysis for Maori medical students showed that mentoring, peer support, personal development, placement within Maori health providers, Maori health education and collegiate support were the most important factors for the successful completion of medicine by Maori medical students.



University of Auckland Vision 20/20

Vision 20/20 is a University of Auckland strategy which includes a goal that by the year 2020, 10% of the Auckland Medical School will be Maori. This program has been in operation since 1999 and aims to encourage Maori and Pacific Islander school leavers to enter in to the medical school and health-related sciences. Graduates from this program receive a Certificate in Health Sciences. On completion of this course students are able to apply for medical school or other health-related courses.⁵⁷ To date almost all graduates have been accepted in to medical and health courses at the University of Auckland. In 2002, nine of the twenty-seven graduates had been admitted to medicine.⁵⁸

Maori and Pacific Island Admissions Scheme

In order to increase the number of Maori and Pacific medical students a separate entry pathway is available within the University of Auckland through the Maori and Pacific Island Admissions Scheme (MAPAS). This program was established in 1972 as an affirmative action program and seeks to provide a supportive environment where students, their families and staff accept a commitment to academic achievement and cultural integrity.⁵⁹ Potential applicants are required to demonstrate a high level of academic achievement and an active involvement within their communities.

The program offers a number of opportunities to successful applicants, including:

- additional tutorial assistance;
- mentoring support;
- cultural opportunities on campus including Pacific language development, involvement in Maori and Pacific health issues, and links with cultural activities on campus;
- the Maori and Pacific fresher camp;
- support in gaining a University of Auckland Access Award;

- support to access the student learning service; and
- support through shared experiences and opportunities for family members to meet staff.

Successful applicants to this program are expected to:

- attend class and complete assignment work;
- seek help early;
- attend tutorials as required;
- learn to speak Maori or a language of the Pacific;
- support and mentor other Maori and Pacific students;
- act as role models as future health leaders and representatives for their community;
- contribute to the development of the Faculty.

The success of the program is identified by the demand for more places. Early in the program only three places were allocated each year however evidence suggests this has increased to nine in 1972, 12 in 1990 and 25 by 2003.

Treaty of Waitangi

Behind most strategies to increase Maori participation in tertiary education is the Treaty of Waitangi. The University of Auckland in their *Missions, Goals and Strategies* (2001) acknowledge and support the responsibilities and obligations of the Treaty of Waitangi when setting strategic goals.⁶⁰ They currently have in place a number of strategies to increase participation in education for both Maori and Pacific Islanders. These strategies include:

- recognising that all members of the university community are encompassed by the treaty with mutual rights and obligations;
- supporting and resourcing the *Runanga*;

- recognising that significant levels of disadvantage accrue to Maori within the education sector;
- increasing numbers and improving success rates of Maori students at both undergraduate and postgraduate levels;
- addressing issues related to access, participation, performance and outcomes;
- increasing the numbers and improving the qualifications of Maori academic and general staff within specific recruitment, development and retention plans;
- acknowledging that Maori staff have community obligations that call on their time and expertise and recognise the appropriate performance of these through the rewards systems of the university;
- identifying and supporting leading edge Maori academic initiatives;
- developing quality academic structures and innovative programs that support Maori language, knowledge and culture, and initiating the *wananga*;
- increasing the levels of Maori staff participation in research and publication including support for innovative research such as Kaupapa Maori approaches;
- ensuring Maori participation in key aspects of the management structures and institutional life of the university;
- identifying and supporting individuals from departments and faculties who will liaise with the Maori academic community; and
- developing national and international relationships as appropriate with educational and cultural institutions and indigenous academic groups.⁶¹

3.5.2 United States of America

The Centre of American Indian and Minority Health website states that of America's more than 800 000 practising physicians, only 1175 were American Indian in 2005.⁶² However, overall racial and ethnic minority group (including African American, Hispanic and American Indian) medical school matriculation rates increased 36.3% between 1990 and 1994 to 12.4 percent of the total number of medical school matriculations, coinciding with Project 3000 by 2000 and other initiatives.⁶³

Project 3000 by 2000

Project 3000 by 2000 was a national ethnic medical student campaign developed by the American Medical Colleges. It aimed to raise the number of ethnic students entering medical school to 3000 in the nation's 126 medical schools by the year 2000.⁶⁴ The program targeted potential students from minority ethnic groups in high schools, introduced science programs into poorly equipped schools, and provided mentoring and counselling for university students considering medicine. However, the project emphasised that although short-term enrichment programs could contribute significantly to increased enrolments in medical schools, ... *strong academic high school curriculum and access to a good college* was more important, since far too few minority students had access to either.⁶⁵

Since the commencement of the project, a large number of medical schools have become involved in a variety of educational partnerships with local school systems, minority community-based organisations and undergraduate colleges. Although the final project was unsuccessful in reaching its 3000 ethnic medical students by 2000, it was successful in maintaining educational partnerships between academic medical centres, colleges, secondary schools, and community groups. These partnerships were found to be key in long-term strategies to increase the applicant pool of minority students ready to pursue a career in medicine.

Doctors Back to School Project

The American Medical Association Doctors Back to School Project⁶⁶ sent ethnic minority doctors and students back into their communities to attract young minority people to medicine by acting as role models and raising awareness. Presentations were conducted in conjunction with other community activities and different age groups were targeted including:

- kindergarten through to third grade;
- fourth through to sixth grade;
- seventh through to ninth grade; and
- tenth through to twelfth grade.

Indians into Medicine

The Indians into Medicine⁶⁷ (INMED) is

... an academic support program aiding American Indian Students in their quest to serve the health care needs of our native communities.

The program offers comprehensive education and support to American Indian students to help them prepare for health careers. Support services include academic and personal counselling for students, assistance with financial aid application, and summer enrichment sessions from junior high through to professional school levels. Over 100 American Indian health students participate in this program each year and another 100 attend the INMED annual summer enrichment sessions at junior high, high school and medical preparatory levels. Most of the participants excel in maths and science. The INMED program maintains close relationships with the University of North Dakota School of Medicine & Health Sciences, area tribes and several national education organisations. The American Indian Board of Directors ensures the program represents the Indian populations. The number of Indian students who participate in INMED increases each year and the scope of the program's activities are expanding.

INMED is making an impact. As of 2005, the program had graduated 163 Indian medical doctors.⁶⁸ A total of 317 Indian health professionals have also graduated through the program.

Indian Health Service

Other initiatives developed in the USA have been implemented through the Indian Health Service to increase the number of American Indian health professionals in the workforce. The Indian Health Service by law must give absolute preference to American Indian/Alaskan Natives when recruiting staff, where the applicant has met all qualification requirements. The Indian Health Service also provides a number of scholarship programs to American Indian/Alaskan Natives including the following.

- The Health Professions Preparatory Scholarship Program provides financial assistance to students enrolled in courses that will prepare them for acceptance into health professions schools. Courses may be either compensatory (to improve science, mathematics, or other basic skills and knowledge) or pre-professional (to qualify for admission into a health professions program).
- The Health Professions Pre-graduate Scholarship Program provides financial support to *students enrolled* in courses leading to a bachelor degree in specific pre-professional areas (pre-medicine and pre-dentistry).
- The Health Professions Scholarship Program provides financial assistance to students enrolled in health professions and allied health professions programs. The recipient incurs obligations and payback requirements on acceptance of this scholarship's funding. Priority is given to graduate students, and junior and senior level students, unless otherwise specified.⁶⁹

3.5.3 Canada

The literature suggests there are approximately 200 Canadian Aboriginal physicians, who account for 0.3% of the 60 000 physicians in Canada overall. The evidence also suggests that most of these physicians are recent graduates and that this may in part be due to a number of university initiatives aimed at increasing Canadian Aboriginal enrolments in medicine.⁷⁰

University of Alberta

The Office of the Aboriginal Health Care Careers Program was instituted by the University of Alberta Faculty of Medicine and Dentistry in 1998.⁷¹ The program assists Aboriginal students to gain admission and graduate from the Faculty of Medicine and Dentistry and other Professional Health Sciences Faculties. As of 2001, the Faculty had graduated 23 Aboriginal physicians, and more recent figures suggest that graduations have risen to 33.⁷² The mandate of the program is to:

- recruit Aboriginal students into the Faculty of Medicine and Dentistry and the other Professional Health Sciences Faculties in order to correct the under-representation of Aboriginal physicians and other health professionals;
- provide academic, administrative and social support and referral to applicants and students in the program; and
- familiarise and sensitise faculty and non-Aboriginal students to Aboriginal health issues including traditional medicine.

The faculty has a national recruitment policy and has recruited Aboriginal students from across Canada. The Coordinator of the program and Aboriginal medical students and graduates

*... present[s] information on the program at national and regional career fairs, workshops, schools, universities and conferences.*⁷³

Recruitment posters featuring Aboriginal students are produced annually and distributed to Aboriginal schools, organisations and interested individuals across Canada.⁷⁴

Northern Ontario Medical Schools

The Northern Ontario Medical School (NOMS)⁷⁵ targets potential Aboriginal medical students and exposes non-Aboriginal students to Aboriginal issues and communities as part of the academic and clinical curriculum from their first year of medicine.⁷⁶ They have also used community forums to identify five major recruitment and retention themes. These include:

- the need for pathways to encourage and nurture Aboriginal peoples into and through medical school;
- the need for knowledge and respect of Aboriginal history, culture and traditions;
- knowledge and exposure to the resources and expertise already available in Aboriginal communities;
- opportunities for collaboration and partnership between Aboriginal communities; and
- an understanding of the challenges and specific health priorities of Aboriginal communities.

The school has already begun to implement the recommendations, starting from the school bylaws call for *... a minimum of five Aboriginal representatives on the 35 member board of directors.*⁷⁷ To ensure success of Aboriginal students admitted to NOMS, the medical school is assessing current support systems. In addition, non-Aboriginal students are exposed to Aboriginal issues and communities as part of the academic and clinical curriculum for all first-year students.⁷⁸



University of British Columbia

The University of British Columbia (UBC)⁷⁹ allocated 5% of its 128 medical seats for Aboriginal students in 2004 and have developed a number of recruitment strategies and initiatives. Hayley, (2003), reports on a study conducted by a group of first-year and second-year medical students at UBC.⁸⁰ This study found a lack of consistency throughout the country in how medical schools developed policies and initiatives to recruit and support Aboriginal people. On completion of the study the group committed themselves to providing support to other Aboriginal medical students. The group also developed a recruitment program that encouraged Aboriginal high school students to consider health care as a career, including:

- Aboriginal medical students visiting high schools and talking to Aboriginal students;
- developing posters highlighting the need for Aboriginal physicians;
- facilitating a network for high school students to obtain information about applying to study medicine;
- linking Aboriginal students with Aboriginal medical students and physicians, thereby providing support prior to entering medical school; and
- a proactive associate Deans of admissions policy committee

UBC will also implement a program that provides support to Aboriginal students and addresses the concerns of both the Aboriginal community and the medical school. The same academic standards apply to Aboriginal people as to other students. However they are only required to achieve 50% of the standard criteria for admission. The other half relates to community service, involvement in health care, the approach to the practice of medicine, letters of reference and so on.

A number of Canadian universities have also embedded Aboriginal perspectives into their curricula. Funding has been made available

for Aboriginal students, and the need for greater collaboration with Aboriginal communities in the region of medical schools has also been acknowledged.⁸¹

3.6 Australian Indigenous doctor and medical student numbers

According to the AIHW, 2003, there were 90 Indigenous Australian doctors compared to 48 119 registered doctors in Australia overall in 2001.⁸² This indicates that Indigenous doctors account for 0.18% of the medical profession, despite 2.4% of the Australian population being Indigenous.⁸³

DEST data indicates that 102 Indigenous students were enrolled in medicine in 2003. CDAMS data⁸⁴ indicates that 9233 domestic and international students are currently enrolled in medicine in Australia overall. These figures indicate that Indigenous medical students still only make up 1.1% of the medical student population.

The AMA commissioned Access Economics⁸⁵ to undertake a study on the Indigenous health workforce in 2004. The Australian Medical Association (AMA) 2004 Discussion Paper *Healing Hands – Healing Hands: Aboriginal and Torres Strait Islander Workforce Requirements*,

... the AMA believes that to improve the health of Aboriginal peoples and Torres Strait Islanders it is critical to increase the proportional representation of this group employed within the general health workforce. To increase the proportion of Aboriginal peoples and Torres Strait Islanders working as health professionals to non-Indigenous levels 928 doctors ... need to be trained.

According to the AMA, to fill the gap in 10 entry years, fifty Indigenous students would need to enrol in medical schools across Australia each year for the next four years and then one hundred would need to enrol each year after that. This would mean that each medical school in Australia would need to enrol three Indigenous students each year for the first four years and seven each year after that.⁸⁶

4. FINDINGS

4.1 Indigenous doctors and why they pursue medicine

4.1.1 Indigenous medical student and doctor numbers

According to the findings of the Best Practice Project, 102 Indigenous medical students were enrolled in medicine in 2004/2005. In comparison to DEST figures for 2003 this indicates that overall Indigenous medical student enrolment numbers did not increase between 2003 and 2004.

Indigenous medical student enrolment numbers have remained at 1.1% of overall medical student enrolments since 2003 (see Table 3).

The Best Practice Project findings found that there were 76 Indigenous doctors in 2004/2005 compared to 90 in 2003 identified by the AIHW statistics.⁸⁸ However, only 28.5% of medical schools surveyed kept an updated record of the number of Indigenous students who had graduated in previous years.

Table 3. Comparison of Best Practice Project findings on Indigenous medical student enrolments with data on overall medical student enrolments collected by CDAMS (2004).⁸⁷

University	Indigenous medical students (BPP 2004/05)*	Medical students overall (CDAMS, 2004)	Proportion of Indigenous to non-Indigenous students (%)
Bond University	0	n/a**	n/a
Flinders University	2	387	0.5
Griffith University	1	n/a	n/a
James Cook University	16	388	4.1
Monash University	1	993	0.1
Notre Dame University	0	n/a	n/a
The University of Adelaide	12	809	1.5
The University of NSW	10	1274	0.8
The University of Newcastle	24	455	5.3
The University of Queensland	6	1029	0.6
The University of Sydney	7	935	0.7
The University of Tasmania	2	479	0.4
University of Melbourne	2	1533	0.1
University of Western Australia	19	869	2.1
Australian National University#	0	82	0.0
Total	102	9233	1.1

* Data based on voluntary identification. Numbers may have altered since the course of the project.

** CDAMS does not carry data on privately funded medical schools.

The Australian National University did not participate in the Best Practice Project survey.

4.1.2 Reasons for pursuing and staying in medicine

Indigenous medical graduates chose to pursue a career in medicine for a range of reasons:

- 60% of medical graduates stated that it was their desire to work in Indigenous health and with their community;
- 86% attributed family members and role models with providing encouragement and support to pursue a career in medicine.

Other factors influencing Indigenous medical graduate enrolments in medicine included marketing (e.g. seeing posters and articles featuring Indigenous medical students and doctors), university orientation camps and, collegiate support from Indigenous students already enrolled.

I wanted to help my people to do something personally to address the appalling state of Aboriginal health.

Seeing a poster advertising Indigenous people studying medicine.

Indigenous medical graduates

All Indigenous students surveyed in this project stated they were determined to stay at medical school and complete their studies despite experiencing many personal, academic, financial and other challenges.

I am determined to finish and become a doctor and can't wait to change the (poor situation of) our health.

I have a burning desire to make a difference ... I have come this far, I'm not going to give up now.

I have strong personal commitment to my people, they are counting on me. I know my success in this will give them the greatest satisfaction.

Indigenous medical students

4.2 Existing Indigenous recruitment and retention strategies in Australia

The Best Practice Project found that Australian medical schools currently employ a range of recruitment and retention strategies for Indigenous students (see Figures 1 & 2, see next page).

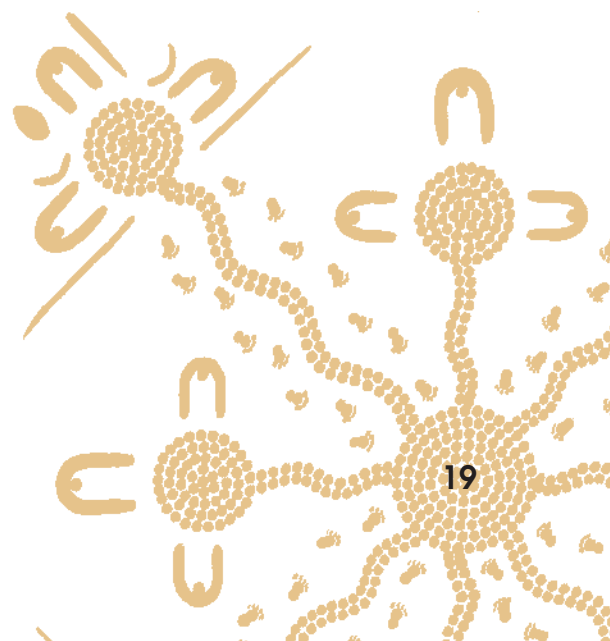


Figure 1. Recruitment strategies in Australian medical schools.

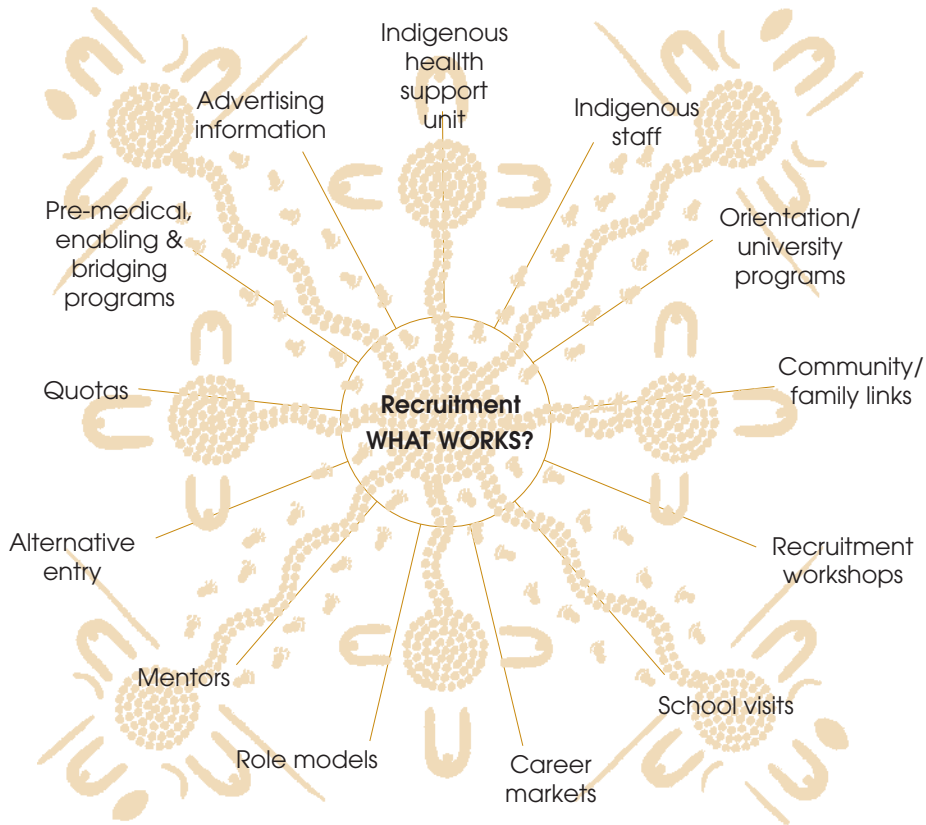
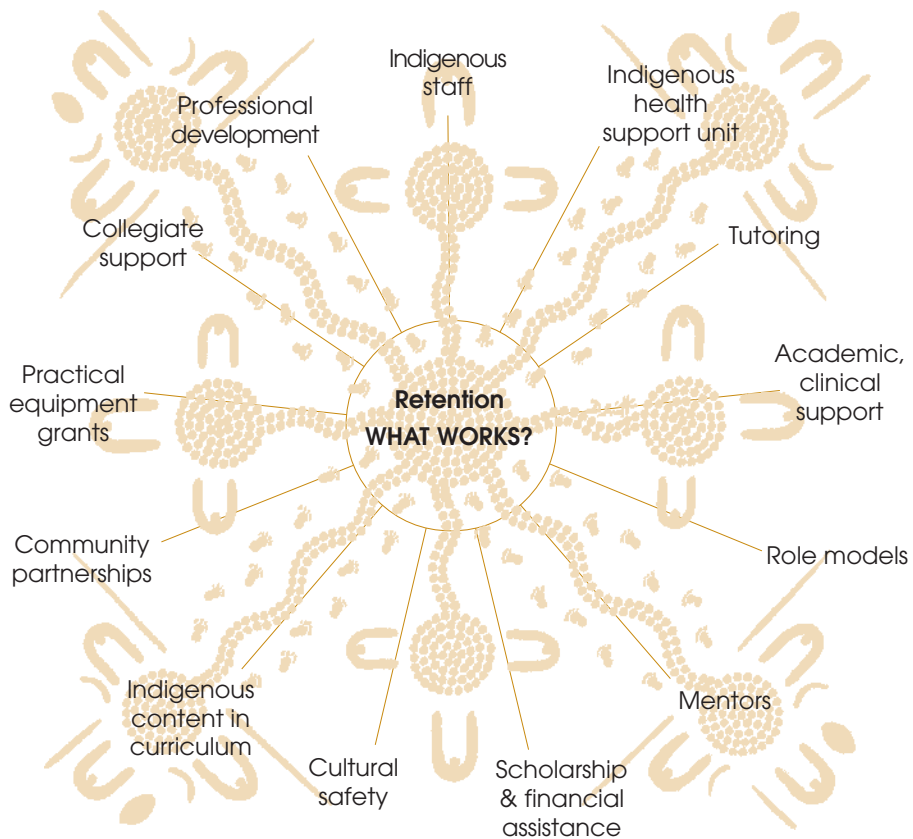


Figure 2. Retention strategies in Australian medical schools.



Many recruitment strategies draw on themes similar to those used in retention and vice versa. However, not all medical schools employ all of the above strategies and some do not employ any (see Table 4). Of the 14 medical schools surveyed by the Best Practice Project:

- 57% have recruitment workshops;
- 86% offer an alternative mode of entry;
- 36% offer enabling or bridging programs; and
- 36% have specific Indigenous health or medical support units.

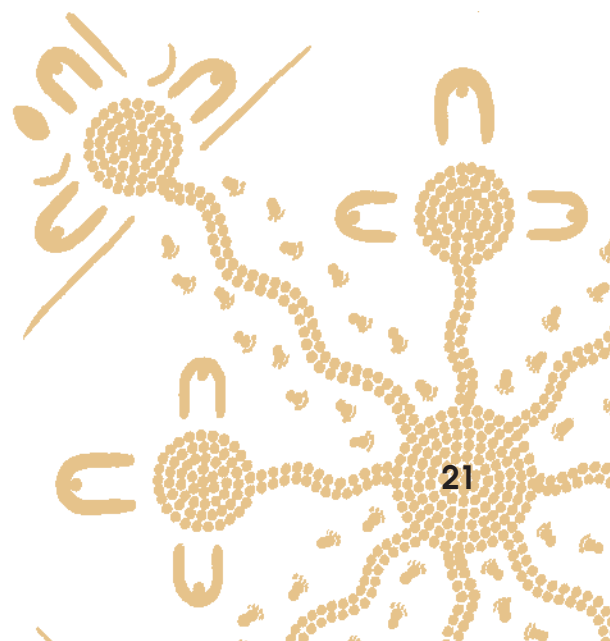
4.3 Themes in relation to best practice

Medical schools with the greatest number of Indigenous medical students identified a comprehensive approach including the following elements:

- locally based strategies;
- building relationships with potential students, families and communities;
- Indigenous medical or health support units; and
- Indigenous staff; and
- university and school visits.

Table 4. Recruitment and retention strategies in use at different medical schools across Australia.

Medical schools	MS1	MS2	MS3	MS4	MS5	MS6	MS7	MS8	MS9	MS10	MS11	MS12	MS13	MS14
Recruitment workshops	-	-	-	✓	✓	-	✓	✓	✓	✓	-	-	✓	✓
Enabling/ bridging	-	-	-	✓	-	-	✓	✓	✓	-	-	-	-	✓
Identification	-	✓	-	-	✓	-	✓	✓	✓	-	✓	-	-	✓
Alternative entry	-	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓
Subquotas	-	✓	✓	✓	-	-	✓	-	✓	-	-	-	-	✓
Indigenous health units	-	-	-	✓	-	-	✓	✓	✓	-	-	-	-	✓
Indigenous staff	-	✓	-	✓	✓	-	✓	✓	✓	✓	-	-	-	✓
Scholarships	-	-	-	✓	-	-	✓	✓	✓	-	-	-	-	✓



Mentoring, curricula and cultural safety were also identified by staff, medical students and graduates as integral to best practice. However, they said that not all of these elements were being implemented effectively. The findings indicate that the themes in relation to best practice are:

- personal contact and community engagement;
- university and school visits;
- Indigenous health support units;
- Indigenous staff;
- mentoring;
- curricula; and
- cultural safety.

4.3.1 Personal contact and community engagement

The importance of maintaining personal contact, building trust and developing supportive relationships, partnerships and networks was identified by all Indigenous student support workers as the most important strategy for attracting Indigenous students to medicine and retaining them.

... face to face contact visits as they give personal stories, detailed information and program and institution specific details.

... personal contact, community engagement ... word of mouth.

Indigenous student support workers on the most successful strategies



Best practice Indigenous health support units currently involve Indigenous communities in a number of ways, including:

- consulting, developing and implementing recruitment and retention strategies with local community representatives;
- involving Indigenous community members in the medical student interviews, selection processes and support;
- encouraging Indigenous community members to regularly teach Indigenous health and cultural issues;
- providing regular opportunities for students to visit Indigenous communities and health services to talk with community members and listen to community issues;
- arranging clinical placements in Aboriginal Medical Services (AMS); and
- medical (or health school) staff building relationships with local Indigenous community members and families and regularly providing information on medicine, higher education and medical courses.

The community (members are) involved with the admissions interviews, delivery of Aboriginal Health curriculum, (and are) guest speakers etc. All medical students are offered to do electives with Aboriginal medical services and communities in urban, rural and remote locations. Community research partners have been developed (and there is) comprehensive community engagement (and) representation on community boards.

Indigenous student support worker at a medical school with a high number of Indigenous students

However, Indigenous medical graduates also warned against tokenistic and unsupported community involvement. This included not adequately preparing Indigenous community members for the challenges of teaching in tertiary institutions and concerns that contact with communities was not comprehensive and appropriate.

... you can't just throw (community members) in the deep end.

... on paper it looks like they do a lot of community activities, but attending NAIDOC week once a year is not enough.

Indigenous medical graduates

Other issues raised by Indigenous student support workers included frustration over lack of time to 'get to the community' due to other work pressures and concerns that the importance of community involvement was not adequately valued by the medical school as a whole.

Personal contact, building trust and developing supportive relationships, partnerships and networks is the most important strategy for attracting Indigenous people in to medicine and retaining them.



4.3.2 School and university visits

Sixty-seven percent of Indigenous student support workers emphasised the importance of engaging with primary and secondary school students regularly and in a number of different ways, depending on their age. These included:

- Indigenous medical students and doctors visiting schools and communities to talk about medicine;
- Indigenous medical students and doctors acting as role models and mentors for younger children;
- primary and secondary students visiting medical schools and universities for orientation days, and summer and health camps;
- arranging different recruitment activities and strategies for different age groups; and
- regularly attending Croc festivals, Vibe 3 on 3s and other local career festivals.

Each of our strategies target different potential students. The year 8, 10 and 12 camps are probably the best for school age. Word of mouth for older students. Media ads ... (for) career options.

Indigenous medical student support worker

Planned visits to the medical schools, touring the school's facilities and meeting faculty staff were identified as significantly contributing to the recruitment of Indigenous people to medicine and/or other health fields.

School contact, building relationships with prospective students, Indigenous specific career events and word of mouth.

The building of relationships with both the prospective student and with their families is of paramount importance.

Indigenous student support worker

A number of these activities are also held in conjunction with other faculties and disciplines within the university, particularly in health.

... we don't really mind which course they end up in – as long as they're happy with their choice and believe in themselves.

Indigenous student support worker

The need to engage with Indigenous children from an early age was emphasised by many participants. However, many Indigenous student support workers felt that more definite government strategies and policies were needed in this area. For example, a number of workers were concerned that school careers advisors were steering Indigenous students away from university and towards technical qualifications.

... we don't really mind which course they end up in – as long as they're happy with their choice and believe in themselves.



4.3.3. Indigenous health support units

While 86% of the 14 medical schools surveyed for this project had links with general Indigenous Support Units, only 36% had Indigenous health support units and 14% had Indigenous medical support units, depending on if they were part of a faculty of health or medicine.

The medical schools with Indigenous health or medical support units have the most Indigenous medical students enrolled. For example, the medical school with the longest established Indigenous health support unit has the highest number of Indigenous students. Another newly established medical school that has strong links to an Indigenous health support unit, attracted a significant number of Indigenous medical students in their first year of operation.

Fifty-seven percent of the students interviewed during this study rated Indigenous health or medical support units as their main criteria for choosing to attend their particular university, equal only to being close to home. The support needs they identified as receiving from Indigenous Health Support Units included:

- mentoring and clinical guidance;
- access to Indigenous health staff and doctors (internal and external);
- transition and career/professional development support;
- opportunities to sustain and maintain relationships with other organisations/ departments that support and nurture their personal development in medicine, such as AIDA;
- links to other social, emotional, academic, financial and cultural support services;
- access to computers, internet, printers, photocopiers, and health and medical library resources;

- tutorial rooms specifically for Indigenous health and medical students;
- tutorial and other assistance in preparing for assessments and exams;
- information about specific health and medical scholarships and grants;
- assistance to attend health conferences and educational meetings;
- information on cadetships, and assistance with holiday employment; and
- collegiate and social activities such as barbeques, sporting activities and community/university events.

The location of these units appeared to be integral to their success. For some, the location was within the medical school, while for others it was within the wider Indigenous support unit. Importantly, these units needed to be perceived by students to be convenient and easy to access.

Indigenous health support unit is physically located within the medical school.

(Indigenous medical support unit) and (general Indigenous support Unit) are co-located ... this is pivotal to the success of the recruitment, retention and support of students.

Indigenous student support workers

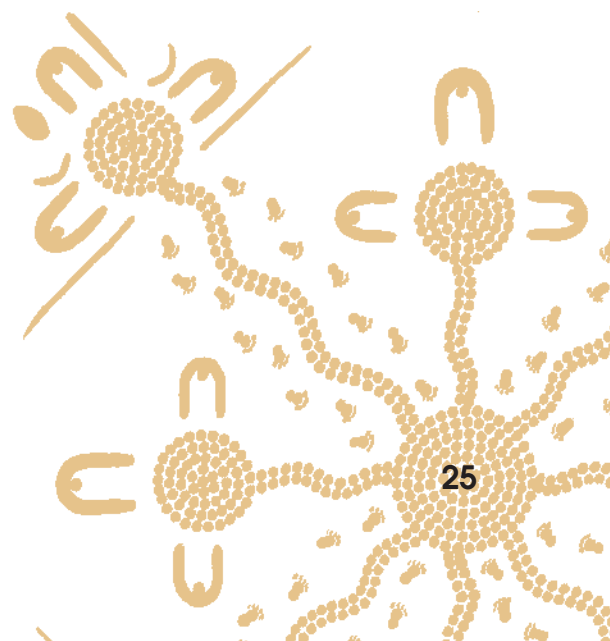
Co-location of support units also provided for greater access to and sharing of resources. Co-location also provided important support to the Indigenous staff.

However, a number of concerns about expectations that Indigenous support units will 'do everything' were raised by staff and students. In particular, many Indigenous support workers felt there was a tendency for medical schools to delegate 'everything Indigenous' to the support unit, including all recruitment, retention, support and promotion activities. Workers felt this placed too much demand on the unit (which may often only have one part-time staff member) and meant they had less time to spend with the students. This was also reflected in comments from students and graduates

Yes, they might have a great (Indigenous) support unit.. but no one is ever there.

Indigenous medical student

Fifty-seven percent of the students rated Indigenous health or medical support units as their main criteria for choosing to attend their particular university.



4.3.4 Indigenous medical school staff

Twenty-two Indigenous academic and general staff are employed across the 14 medical schools in Australia, but most of these are working part-time or on a casual basis. Indigenous staff, both academic and general, provide invaluable contributions to the recruitment and retention of Indigenous medical students, including:

- experienced academic, clinical and emotional support;
- mentoring and role modelling;
- cultural safety;
- shared personal, academic, and cultural experiences;
- trust and confidence both with students and wider Indigenous community;
- sensitivity to racism, discrimination, impact of history;
- advocacy and links with other Indigenous supports; and
- understanding of family, community and cultural needs and issues.

Medical schools with the greatest numbers of Indigenous students employ significantly more Indigenous staff. They also employ Indigenous doctors to both teach and support Indigenous students. For example, one medical school employs two permanent Indigenous doctors and one non-Indigenous doctor, two of whom are available on a full time basis. Another medical school has two full-time Indigenous support workers and Indigenous doctors regularly taking up short-term teaching and support positions.

... being able to talk to an Indigenous person about any issues that might arise.

... knowing that if they're there and that they'll go out of their way to help me.

Indigenous medical students on the benefits of having Indigenous staff members

However, the findings indicate that many Indigenous staff employed across the medical and/or health faculties, feel overworked and under pressure to address the substantial issue of Indigenous medical student recruitment and retention on their own or with very little assistance.

(we have) ... a ridiculous workload that includes teaching across the entire school, research, publications, student support, clinical and community responsibilities.

... it is impossible to implement (recruitment, retention and curriculum) strategies while there is only one singular fractional appointment in Indigenous health.

Indigenous student support worker

The demands placed on Indigenous staff are complex and wide ranging. Their roles include:

- student teaching;
- Indigenous student support;
- marketing, recruitment, and selection of students and staff;
- academic, personal, economic and career counselling;
- tutoring in study skills;
- curriculum development;
- internal and external advisory functions;
- funding and budget responsibilities;
- managing and coordinating staff and students;
- community engagement and responsibilities;
- mentoring students;
- supporting non-Indigenous students studying Indigenous health;
- research;
- professional development seminars;
- conference presentations, public speaking; and
- advocacy.

A number of concerns and pressures were reported by Indigenous staff within medical and health faculties. These included:

- usually short-term employment contracts;
- externally funded employment contracts;
- lack of job security;
- high staff turnover;
- lack of program stability and staff continuity;
- lack of access to experienced Indigenous staff;
- confusion and inequities in position classification, salary levels;
- multiplicity of tasks, roles and responsibilities;
- work overload;
- pressure to seek alternative funding sources for student recruitment, retention and staffing;
- career development including access to promotional structures;
- lack of opportunities for career development and promotion;
- relationship to the institution, including isolation, lack of communication, lack of recognition from peers and lack of support;
- tokenism;
- inadequacy of physical resources often resulting in overcrowding, inadequate equipment and resources;
- lack of cultural safety for staff; and
- dealing with racism and discrimination within the university.

... it is impossible to implement (recruitment, retention and curriculum) strategies while there is only one singular fractional appointment in Indigenous health.

4.3.5 Mentoring

When asked about the support they would like during their degrees, 43% of surveyed Indigenous medical students identified mentoring. Mentoring is important both for providing support to students during their degree and guiding graduates in their professional development and negotiating the health workforce.

This (mentoring) is most important, you need to be able to talk to someone who is a doctor and has undergone what you have gone through. This mentorship would also be very useful for junior doctors to be able to talk to a senior doctor.

The contact with people who are here or who have studied here seems to be the most successful, and it provides the ongoing support and guidance.

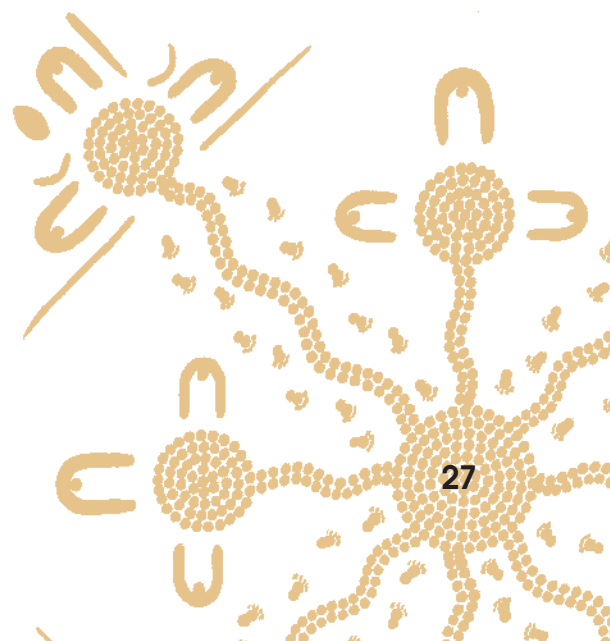
Indigenous medical graduates and student support worker

Although 50% of Indigenous medical students had a mentor, most of these had sought that person out for themselves.

I have just sourced my own mentor.

Found (mentor) myself – or rather he asked me if I would consider him to be my mentor.

Indigenous medical students



Students and graduates tended to refer to mentoring and role modelling as meaning the same thing.

Role models that can act as mentors and careers guidance in the medical world.

... (mentoring) is always helpful to see that other role models have gone before and achieved.

Indigenous medical graduates

Mentoring is most important, you need to be able to talk to someone who is a doctor and has undergone what you have gone through.

4.3.6 Indigenous content in medical curriculum

Almost all Indigenous medical students surveyed in this project (there was one exception) were disappointed with the lack of Indigenous content in the medical curriculum and the inappropriateness of that content.

... there was only one case study in two years and it came at the worst time when everyone was preoccupied (with other work) ... it was low priority.

... pathetic – one lecture and discussion panel given in fourth year.

... it is limited and paternalistic in nature ... a strongly biased western focus.

Indigenous medical students

In 2004, CDAMS Indigenous Health Curriculum Project developed the nationally agreed Indigenous Health Curriculum Framework for the inclusion of Indigenous health into core medical curricula. This document has been endorsed by all Deans and is included in the Australian Medical Council (AMC) accreditation guidelines. This will require all medical schools to report on the implementation of the CDAMS Framework as part of their accreditation process. CDAMS is currently in the second phase of this project which involves supporting medical schools in the development and implementation of Indigenous health content into their curricula, using the Indigenous Health Curriculum Framework as a guide.⁸⁹

Some medical schools have already been embedding Indigenous curricula in their medical courses where possible. These schools currently have the most Indigenous medical students enrolled.

... pathetic – one lecture and discussion panel given in fourth year.

In 2004, CDAMS Indigenous Health Curriculum Project developed the nationally agreed Indigenous Health Curriculum Framework for the inclusion of Indigenous health into core medical curricula



4.3.7 Cultural safety

Sixty-six percent of Indigenous medical students surveyed for this project said they experienced racism and discrimination. Sixty-four percent felt that they were not supported adequately by their medical school. Lack of support was often equated with the absence of an Indigenous health support unit and lack of Indigenous staff. In medical schools where there are limited numbers of Indigenous staff, some students said they were being left to teach non-Indigenous staff and students about Indigenous cultural issues and handle confronting attitudes towards Indigenous people.

We (Indigenous students) were separated into groups and left to describe and educate other students (about Indigenous issues) ... this can be confronting at times.

Indigenous medical student

Indigenous medical graduates also reported experiences of racism and discrimination in a number of forms.

Odd comments ... that I had failed all exams but (was) only allowed to continue because I was 'blackfella'.

Following successful completion of (a very difficult specialist exam) one colleague commented 'you only got through cos' you're black'.

(I was) often made to feel inferior by other students and/or faculty members, (saying) that (I) 'must be dumb' because (I) only got into the course because (I'm) Aboriginal.

Indigenous medical graduates

Individuals who entered medicine via alternative entry said that they were exposed to discrimination by staff and peers who implied they were given 'special treatment' and were not good enough to compete with the rest of the applicants. Students also said they experienced racism and discrimination because of the way they did or apparently did not 'look'.

Many think we have a lot of benefits and opportunities that others don't get.

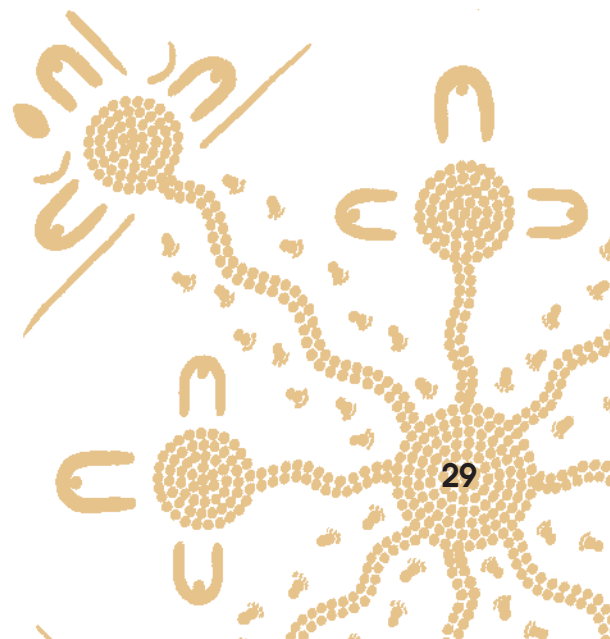
Students are always sceptical of Indigenous students and their entrance criteria.

Having a mixed cultural background and not looking traditional provides for some not thinking I am Indigenous, this is very stressful.

Indigenous medical students

In comparison to cultural awareness, cultural safety maintains that individuals are diverse.⁹⁰ It is based around attitudinal change, respecting an individual's cultural values and addressing issues surrounding power imbalance. Cultural safety aims to identify attitudes that may exist, either consciously or unconsciously, towards cultural differences, allowing individuals to see the impact these attitudes have on others and attempt to change those attitudes.

Sixty-six percent of Indigenous medical students surveyed for this project said they experienced racism and discrimination.



4.4 Other themes in relation to recruitment and retention

4.4.1 Promotion

Advertising and available information

Access to clear, concise and culturally appropriate information on medicine and medical degrees, targeted at different age and social groups was identified as critical by Indigenous support workers and students. Two Indigenous graduates said that it was advertising featuring pictures and information by Indigenous doctors that first encouraged them to pursue a career in medicine.

I saw a poster up at (a university Indigenous support centre).

(I) saw an advertisement in the paper calling for Indigenous people to enrol in medicine.

Indigenous doctors

However, Indigenous student support workers and medical students said that not enough advertising and information about how to get into medicine is available. They identified the need for both general and Indigenous-specific media involvement, advertising and information brochures in order to get their messages across.

I think that very few Indigenous HSC students are aware that Indigenous medical entry programs even exist, most of the time if they do, none actively seek out the information and they miss out'.

There needs to be info sharing around how to get into medicine and this information needs to be culturally appropriate.

Wider advertising and encouragement (is) needed to increase (the) number of applicants.

Indigenous student support worker and medical students

Only 21% of the medical schools advertised their course through one or more of the following forms of Indigenous media:

- Koori Mail;
- Torres News;
- Indigenous Times;
- Yamatji News;
- Aboriginal and Islander Health Worker Journal; or
- Indigenous radio service.

Other low cost advertising included:

- university newspapers/letters;
- Aboriginal Health Organisation newsletters;
- mailouts to schools and organisations.

... (there needs to be more) utilising of Indigenous communications and media.

Indigenous student support worker

The university's generic Indigenous Support Unit usually develop Indigenous advertising material for both mainstream and Indigenous media. In some cases this is done in collaboration with mainstream marketing departments. However, anecdotal evidence suggests it is uncommon to see Indigenous people featuring in mainstream university promotional material.

I think that very few Indigenous HSC students are aware that Indigenous medical entry programs even exist, most of the time if they do, none actively seek out the information and they miss out.

School careers advisors

Another issue raised during the project was the lack of or inappropriate advice provided to Indigenous students by career advisors within high schools. Two Indigenous support workers felt that there was a tendency among some school career advisors to assume that Indigenous school students were not capable of entering and/or achieving in tertiary studies and medicine in particular. They said that school careers advisors often seemed to steer Indigenous students towards TAFE qualifications and careers instead. They felt this was partly due to school careers advisors not being well enough informed or committed to advancing career opportunities for Indigenous people.

Working with career counsellors doesn't seem to have much of a positive impact either, I think that the old ways of believing re: Indigenous students academic capabilities is still around.

... the information is mailed out to careers advisor(s) and they may not receive it, read it or do anything about it ...

Indigenous student support workers

School careers advisors often seem to steer Indigenous students towards TAFE qualifications and careers.

Mature age entry

Twenty-nine percent of Indigenous medical students surveyed for this project highlighted the need to focus more on mature age students and students from other disciplines when recruiting Indigenous medical students.

... scour the biomed and health science degree students ... and show them how they could do med after their degree.

... recruit mature age students from current health workers and nurses.

... there still seems to be a large proportion of mature age students that could be targeted better.

Indigenous medical students commenting on recruitment issues

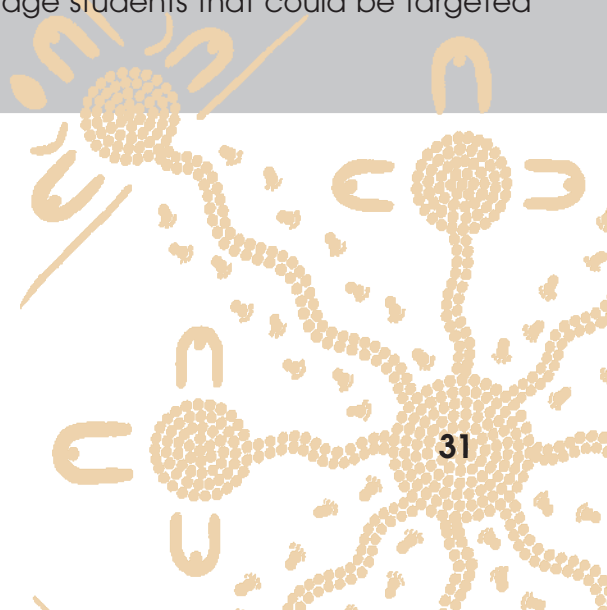
Indigenous support workers also identified the need to reach out to mature age students more, particularly for graduate entry programs.

... there needs to be information for people who are not at schools or universities but could apply.

Indigenous student support worker

Some university representatives at the LIME Connection workshop felt there is not a big enough pool of graduates to recruit to medicine. Other representatives argued there is a great untapped pool of potential mature age entrants and that students enrolled in other university degrees and people in the workforce needed to be more effectively targeted.

... there still seems to be a large proportion of mature age students that could be targeted better.



Pre medical, enabling and bridging programs

Of the 14 medical schools interviewed only two offered a pre-medical program to Indigenous students and five delivered enabling or bridging courses that complemented entry into medicine. Three Indigenous medical students said they chose to enrol at their particular university because of the pre-medical or bridging program offered.

It happened somewhat accidentally, I was actually thinking of enrolling in (another degree). I went on a trip to a couple of unis and (one university) offered a new entry scheme for Aboriginal students wanting to do medicine.

Indigenous medical graduate

Pre-medical programs are short term and offered to Indigenous people either thinking of applying to do medicine or about to commence first year. Enabling and/or bridging courses are usually offered to provide Indigenous students with the necessary skills to undertake a medical or other health degree. Both options provide Indigenous students who may not be ready to go straight into medicine with the opportunity to improve their chances of being accepted in the following year. These courses are developed to:

- provide educational pathways for students lacking traditional qualifications for entry into university;
- prepare for university study, students who require additional preparation through foundation skills and knowledge development, confidence building and/or awareness;
- assist prospective students with the transition into higher education, and hence better position students for persistence and success; and
- generally promote widening participation in higher education and breaking down of traditional barriers to study.⁹¹

4.5 Admissions

4.5.1 Alternative entry schemes

All universities offer an alternative mode of entry to students who are from disadvantaged groups or mature aged. While some universities have Indigenous-identified alternative entry schemes, government policy on increasing access and participation to higher education includes ... *conducting alternative selection procedures and recommending on admissions* for a range of disadvantaged groups.⁹² Indigenous people therefore fall under the 'disadvantaged' or mature age category and can apply to university under alternative entry, as can many non-Indigenous people.

Ninety-three percent of medical schools require applicants to sit the Graduate Australian Medical School Admissions Test (GAMSAT) / UMAT before they apply for alternative entry. Applicants who are eligible can then apply to the medical schools under the alternative entry scheme. In many cases this means that students' qualifications for entry into medicine are assessed according to their GAMSAT/UMAT score, year 12 scores and an interview. Factors taken into consideration in interviews include prior academic performance, life and work experience, contribution to community, references, and commitment to medical and health issues. Medical schools may also recommend that students spend a year or two in a Bachelor of Science or other relevant bridging course before transferring to medicine. For Indigenous applicants, Indigenous community representatives may be asked to participate in interviews as panel members, applicants may be able to bring along a family member and community-based interviews may also be offered. However, in general, alternative entry methods are not exclusive to Indigenous people.

4.5.2 Quotas for Indigenous medical students

Only six medical schools have identified places available for Indigenous medical students. The number of places available for Indigenous medical students range from one student to a maximum of eight. However some medical schools will take more Indigenous people if they apply. The medical schools with the greatest number of identified places have the greatest number of Indigenous students enrolled.

However, identified places for Indigenous students are only subquotas. This means that the places offered to Indigenous students are not extra and must be accommodated within the medical schools' overall student quota. It also means that if not enough Indigenous students apply to medicine, these places can be re-allocated to non-Indigenous applicants.

Thirty-six percent of Indigenous students said that current quota arrangements lead to perceptions that Indigenous students who apply via alternative entry are 'taking away' places that could be going to non-Indigenous students who have applied through standard processes.

I never felt like I belonged, I always felt like an outsider. Medicine was full of extremely wealthy people that looked down on me (saying) ... 'you took my friend's spot in medicine'.

Indigenous medical graduate

The Australian Medical Association 2004 discussion paper, *Healing Hands – Aboriginal and Torres Strait Islander Workforce Requirements*, has called for full scholarships for all Indigenous medical students.⁹⁴

I never felt like I belonged, I always felt like an outsider. Medicine was full of extremely wealthy people that looked down on me (saying) ... 'you took my friend's spot in medicine'.

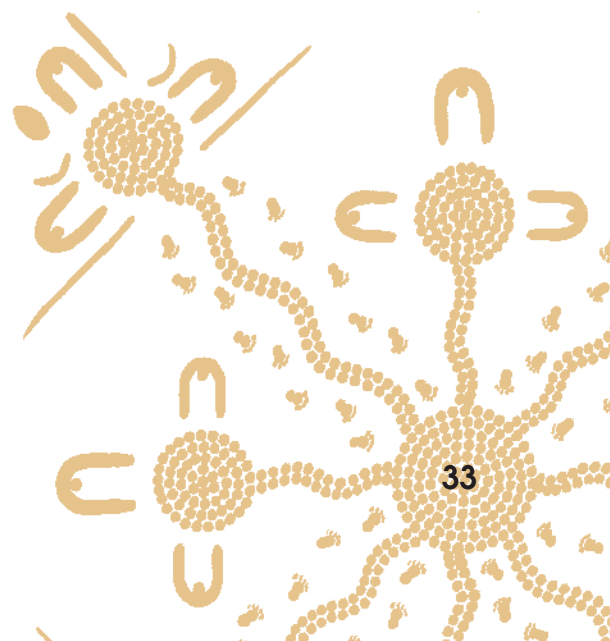
4.5.3 GAMSAT and UMAT

Ninety percent of medical graduates felt strongly that the GAMSAT and UMAT tests were not an effective way of recruiting Indigenous students to medicine. Although the tests are said to be developed and designed in a culturally fair and equitable way⁹⁵ many believed the tests were not appropriate, particularly for Indigenous Australians.

GAMSAT is a real issue, whether it is a culturally appropriate tool, very western paradigm.

... other people can have a similar worldview to Indigenous peoples but on the whole I think the admission process favours white middle/upper class applicants.

Indigenous student support workers



These participants felt that the tests were culturally biased and did not take into account cultural differences, historical events, language barriers and the health and education status of Indigenous Australians and other minority groups (see Table 5).

Table 5. Example of a UMAT question and comments on its appropriateness for Indigenous applicants.⁹⁶

SECTION 1: LOGICAL REASONING AND PROBLEM SOLVING

QUESTION:

The life expectancy of Australian women is about 82 years, double that of women in the 1850s. While the average age of menopause (the end of fertility – generally about 50 years old) has remained steady over this time, that of menarche (the onset of fertility) has dropped markedly.

From this information, it follows that:

- A)** the likelihood of women conceiving during their fertile years has decreased.
- B)** women are, on average, having fewer children during their fertile years than they did in the 1850s.
- C)** for women who live to menopause, the number of years during which they can conceive children has increased.
- D)** Australian women are living, on average, about the same number of years after menopause as they did in the 1850s.

COMMENT:

*This UMAT question excludes Indigenous women as 'Australian Women'. Life expectancy for Australian Indigenous women is approximately 20 years lower than for other Australians. Over the period 1998-2000, the national perinatal mortality rate for babies born to Indigenous women was twice as high as that for babies born to non-Indigenous women.*⁹⁷

There is no specific program to support applicants, Indigenous or not, in preparing for and undertaking the UMAT/GAMSAT or interview process. However, anecdotal evidence suggests that private tutoring in the GAMSAT/UMAT is available to mainstream applicants who can afford it. This can create financial barriers for Indigenous students who mostly cannot afford these costs and who also often live outside the test centre areas.

Now, those that can afford it, can get all the preparation they can buy (for GAMSAT/UMAT).

... have a GAMSAT venue in a rural area and offer financial travel assistance to get to the interviews.

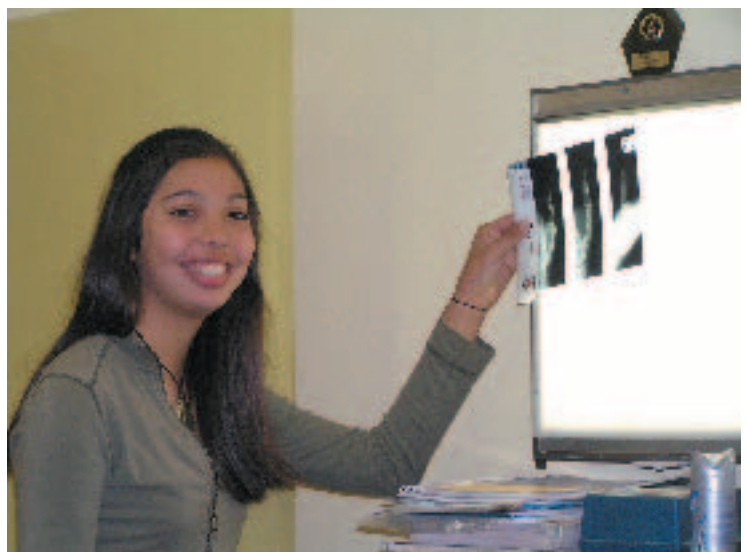
Indigenous medical students

However one Indigenous support unit did offer some assistance in preparing for the application process.

ISU and Indigenous Health Unit have offered tutoring in the interview process and if students were identified early they could contact and discuss/tutor for UMAT.

Indigenous student support worker

Now, those that can afford it, can get all the preparation they can buy (for GAMSAT/UMAT).



4.5.4 Identification

All Australian Medical Schools identified Indigenous students through the admissions process. However, only half the medical schools require applicants accessing Indigenous services to provide supporting evidence of their identity including connection to community.

Medical schools that require proof of identification may do so through their Indigenous support unit. These Indigenous support units often require candidates to provide confirmation of their Indigenous identity in order to access Indigenous specific programs. In most cases this involves individuals completing a 'Confirmation of Aboriginality' form, which must be endorsed by an Aboriginal and/or Torres Strait Islander community organisation. The form is usually based on the government 'three-part definition' which requires information on descent, self-identification and community recognition.⁹⁸

When collecting information on the numbers of Indigenous people in Australia, identification is only provided by individuals on a voluntary basis. This is the same for those applying for entry into tertiary institutions. There are isolated cases where non-Indigenous people have unintentionally marked the 'Indigenous box' during the tertiary admissions application process. In these instances, the Indigenous Support Units usually identify these individuals and steer them in the right direction. Anecdotal evidence suggests that some non-Indigenous individuals have taken advantage of alternative entry options for Indigenous Australians by deliberately marking the 'Indigenous' box.

Identification is a sensitive issue. Some medical schools asked for guidance on ways to address identification issues during selection processes.

Anecdotal evidence suggests that some non-Indigenous individuals have taken advantage of alternative entry options for Indigenous Australians by deliberately marking the 'Indigenous' box.

4.6 Support

4.6.1 Finances

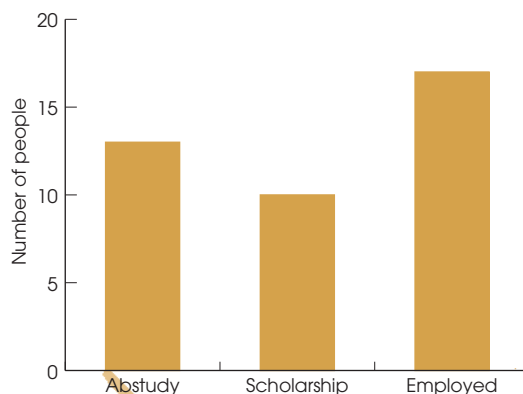
Eighty-six percent of Indigenous medical graduates interviewed during this study identified financial hardship as one of the difficulties they experienced during their studies. Three graduates surveyed mentioned that they had deferred training during their course for financial reasons.

Financial support is a big thing especially with six years out of the workforce. This is a big burden especially for older students with families where the financial impact is not just on personal compromise but compromises the family as well.

Indigenous medical graduate

Graduates interviewed in this study stated that financial support during studies comprised some form of government assistance (Abstudy), scholarship, grant or employment. All graduates interviewed said that they had been employed in part-time work at some points during their university life (Figure 3).

Figure 3. Financial support received by Indigenous medical students during their degree.



Graduates indicated that they often supported other extended family members or younger siblings during their studies and were expected to assist relatives with medical or other health problems. They also said that they struggled with basic resources such as computers, printers, email access and travel costs.

Eighty-six percent of Indigenous medical graduates interviewed during this study mentioned financial hardship as one of the difficulties they experienced during their studies.

4.6.2 Scholarships

Of the 14 medical schools interviewed only four offered direct access to medical-specific scholarships, bursaries or grants for Indigenous medical students. The amounts offered through these schemes ranged from \$1000 to \$6000. Other scholarships are available through state and national government and non-government schemes such as the Puggy Hunter Scholarship, Rotary Grants and the AMA Indigenous medical scholarship. The findings indicate that 59% of Indigenous graduates had received scholarship assistance during their medical degree.

Indigenous medical students and graduates felt that more scholarships should be available for Indigenous medical students in the future.

*...(we need) more scholarships/
governments support.*

*(we need) ... HECS free - fully paid and
funded medical degrees.*

Indigenous medical students

Scholarships can also be adversely affected if a student fails a year of the course and is required to repeat the year. Various scholarships are bonded and also remain taxable and therefore affect student's Abstudy payments.⁹⁹

The AMA has called for fully funded training places and full scholarships to close the gap between Indigenous and non-Indigenous participation in the health workforce.¹⁰⁰

*Scholarships need to be designed in a way
that it does not affect Abstudy payments
nor delete any social security benefits or
incur penalties through academic
difficulties.*

*Careful consideration to bonded
scholarships is needed to prevent stifling
postgraduate vocational training.*

Indigenous medical graduates

The AMA has called for fully funded training places and full scholarships to close the gap between Indigenous and non-Indigenous participation in the health workforce.



4.6.3 Tutorial assistance

Seventy-six percent of Indigenous medical students identified tutorial assistance as one of their main support needs. However, many students found the process of applying for the Indigenous Tutorial Assistance Scheme (ITAS) (formerly Aboriginal Tutorial Assistance Scheme) difficult and time consuming and therefore a disincentive. While some students felt the Indigenous support units were responsible for the difficulties of obtaining an ITAS tutor, in many instances this is not the case. Finding appropriate tutors and endless paperwork is a time consuming process and one which is tied to funding agreements.

Finding tutors and completing paperwork is a huge process and one which is tiring and a particular disincentive to participating in the program.

... having to beg for assistance is not productive.

... in first year, a (professor) said he would help arrange some tutoring, but bureaucratic paperwork always made it impossible ... I gave up asking.

Indigenous medical students

Furthermore, many students said that the way ITAS was structured and provided was not suitable for medical students. In particular, they argued that ITAS did not recognise that many of their courses were the equivalent of a number of courses combined and should therefore attract more than the minimum number of tutorial hours per course.

The ITAS unit was not at all supportive of medical students because our subjects were an all in one subject. They did not understand the amount of time we needed in tutorials and the diversity of subject material that needed to be covered.

The program is designed for standard university courses and takes no consideration for medicine courses which have a different structure to mainstream courses.

Indigenous medical students

Indigenous medical students also said that, in some cases, the kind of tutorial support they were getting was not appropriate. They emphasised the need for medical specific tutorial support from medically trained tutors, Indigenous or not.

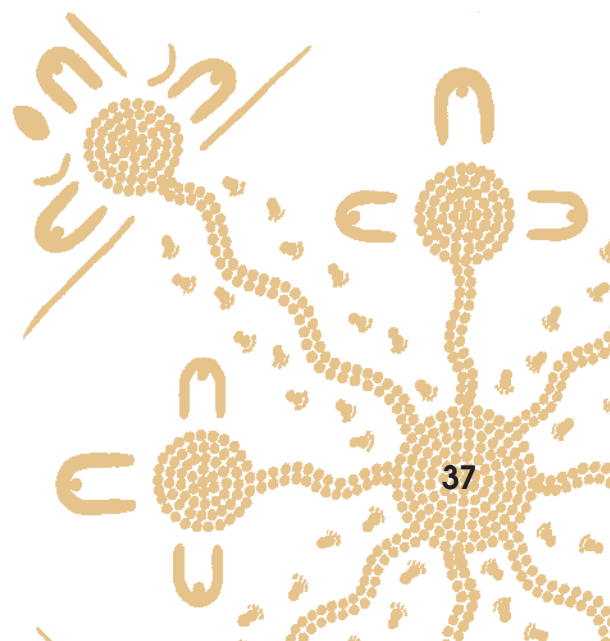
... (tutoring) not suited to medical students ... (and tutors) do not understand the special needs.

... (tutoring has to be) led by a tutor who is up to date with the curriculum of the course.

Indigenous medical students

However, some medical schools have implemented strategies to provide intensive support to Indigenous medical students in the first few years of their degree. To address difficulties with tutorial support, one university employs a medically trained tutor to work part time with the Indigenous medical students.

The program (ITAS) is designed for standard university courses and takes no consideration for medicine courses which have a different structure to mainstream courses.



4.6.4 Collegiate support

All Indigenous medical students with one exception said that they would like more opportunities to work in groups with other Indigenous students. Students said that group activities provided them with opportunities to work, study, socialise and talk about issues with other Indigenous medical students in a non-judgemental way.

... (the) communication is better ... (we) can discuss ideas.

... we provide a more comfortable non-judgmental environment to study and give each other support.

... this is a great way to build relationships which are enduring beyond the parameters of medical school and which give rise to the opportunity of understanding ... experiences and appreciating strengths ...

Indigenous medical students

Collegiate support is often provided through the university Indigenous support units. However, many Indigenous medical students felt the need for more specific support groups that focused on their needs as medical students.

The (Indigenous medical) students have by and large supported each other. We have devised a strategy that enables us to understand what we really needed to study.

Indigenous medical student

Some Medical Faculties and Indigenous support staff provide Indigenous medical students with regular opportunities to gather together for both social activities and learning opportunities. At one university, Indigenous and non-Indigenous doctors hold regular extra clinical tutorials for Indigenous students on the weekends.

... (we have Indigenous student specific) weekend tutorials – including simple and common CXR, AXR, ECGs, practising examination skills and presentation skills to a Doctor.

Indigenous medical student

Collegiate activities provided by AIDA were also mentioned favourably by Indigenous students and graduates.

... having an affiliation with AIDA, learning what I have and knowing that some day I'll make a difference.

One student on their biggest reward in medicine so far

I want to be able to continue to develop the relationships I have with other Australian and International Indigenous Doctors which is something I have been able to achieve through the fantastic support which has been provided through AIDA.

Being involved in the ongoing processes of AIDA is something I have been very respectful of and look forward to continuing for many years!

Indigenous medical students and graduates



AIDA provides Indigenous medical undergraduates and graduates with regular collegiate activities such as:

- the AIDA Annual General Meeting and Health Symposium;
- regional AIDA dinners and activities;
- regional student dinners and activities; and
- opportunities to participate in representative activities such as Croc festivals and Vibe 3 on 3.

... this is a great way to build relationships which are enduring beyond the parameters of medical school and which give rise to the opportunity of understanding ... experiences and appreciating strengths ...

4.6.5 Career progression and development

Indigenous medical graduates said that challenges in pursuing vocational training and entry into specialist colleges hindered their professional development.

... further training and specialisation is expensive, prolongs entry into the workforce and means longer time away from family and community.

(it was difficult) explaining to my extended family that I want to pursue further training before I go home to practice.

Indigenous medical graduates

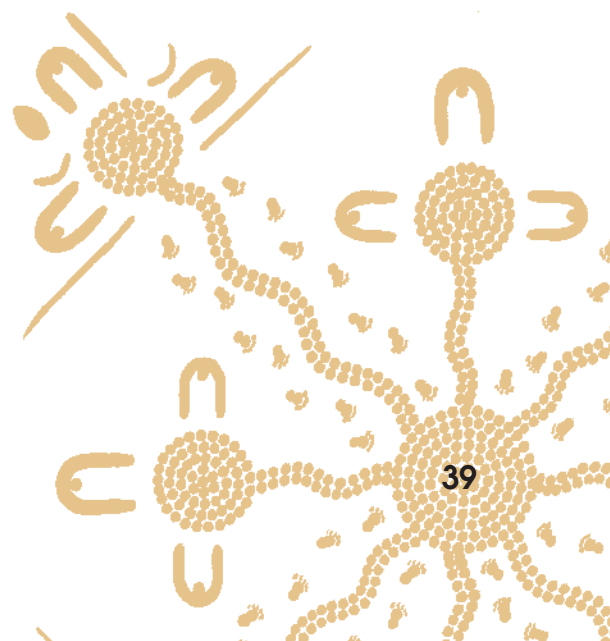
However, graduates also said that they felt pressured from both Indigenous and non-Indigenous people to work purely in the area of Indigenous health and within their communities.

... Indigenous students/doctors have an added burden either real or imagined, this burden to 'work with your people', instead of being a pathologist (for example following your own dreams). This burden seems to come from your fellow medical students (for whom you are the first Indigenous person they have ever met), from well-meaning community members, from some consultants etc.

It is important as a workforce that we not only have Indigenous doctors in AMSs but we have Indigenous doctors as surgeons, intensive care specialist and cardiologists as well.

Indigenous medical students and graduates

It is important as a workforce that we not only have Indigenous doctors in AMSs but we have Indigenous doctors as surgeons, intensive care specialists and cardiologists as well.



LIME Connection statement of outcomes and intent

4.6.1 Outcome 1

Funding and resources will be key to developing and implementing quality curriculum and student support outcomes.

Intent – Develop a funding strategy that is aligned to the agreed resourcing responsibilities between medical schools, DoHA, DEST and other partners.

4.6.2 Outcome 2

Leadership among Deans, medical educators, Indigenous community representatives, policy makers and medical colleges and councils is critical.

Intent – Leadership will continue to be fostered through the CDAMS Indigenous Health Curriculum and AIDA Best Practice Projects, The LIME Network and other initiatives.

4.6.3 Outcome 3

The inclusion of Indigenous health in the AMC's accreditation process is a high priority.

Intent – Work with CDAMS and the AMC to include Indigenous health in the accreditation guidelines, including appropriate protocols and processes, and ensuring the unique status of Indigenous health maintains a protected focus in the accreditation document and process.

4.6.4 Outcome 4

The *AIDA Best Practice Report for the Recruitment and Support of Aboriginal and Torres Strait Islander Medical Students* provides evidence that will facilitate the further development of strategies. The LIME Connection strongly supports the Report.

Intent – CDAMS and medical schools will consider the outcomes of the report in developing national and local implementation strategies. CDAMS and schools will collaborate with AIDA on implementation.

4.6.5 Outcome 5

Staff capacity development on Indigenous health within medical education (Indigenous and non-Indigenous) is a very high priority.

Intent – Support medical schools to trial and implement initiatives to train and work with the particular needs of Indigenous and non-Indigenous staff.

4.6.6 Outcome 6

Quality respectful partnerships with Indigenous communities are critical to quality medical education.

Intent – Medical schools will continue to develop such partnerships and recognise the time and resources to do such, as well consider seeking a coordinated approach to funding student placements. The LIME Network will support the development of best practice for such partnerships.

4.6.7 Outcome 7

The sustainable resourcing and operation of The LIME Network is of highest priority. This provides an opportunity to share resources and experience, and celebrate successes and outcomes.

Intent – Work with partners to establish a secretariat, employ a project officer to develop the network and consider database and other initiatives. Consider development of regular LIME Awards and LIME Connections.

4.6.8 Outcome 8

Continuing to develop coordinated multi-faceted strategies at school level for curriculum and student recruitment and retention reform and implementation is of high priority.

Intent – Medical schools resolve to continue to develop such initiatives, and The LIME Network and the two projects continue to support this process.

4.6.9 Outcome 9

Vertical integration between undergraduate, postgraduate and vocational training for Indigenous health curriculum and student recruitment and support is of high priority.

Intent – Develop a brief, speak with Confederation of Postgraduate Medical Education and Committee of Presidents of Medical Colleges and convene symposiums at their annual meetings.

4.6.10 Outcome 10

Ongoing collaboration between CDAMS and AIDA is critical to success.

Intent – CDAMS and AIDA will strengthen and formalise their partnership through a statement of intent for collaboration.

5. DISCUSSION

The Best Practice Project findings support the evidence that Australia has a severe shortage of Indigenous doctors and show there has been no growth in Indigenous medical student numbers since 2003. This is despite calls on government from senior medical organisations such as the AMA to urgently train more Indigenous doctors.¹⁰¹

It is clear that Australian medical schools are not recruiting and retaining enough Indigenous students. Prior educational and other disadvantages severely impact on Indigenous students' opportunities to successfully apply for medicine.

The findings also indicate that some medical schools are significantly more successful at recruiting and retaining Indigenous medical students, even given these disadvantages. Successful recruitment and retention approaches can also be found in comparative countries such as New Zealand, the USA and Canada.

These observations suggest that improvements are eminently possible in the recruitment and retention of Indigenous students in Australian medical schools if effective approaches are taken.

5.1 Approaches in Australia and other comparative countries

Over 20 strategies are being used by Australian medical schools to recruit and retain Indigenous medical students. A number of observations can be made about these strategies:

- They range from identified policies such as alternative entry schemes to overall principles such as community engagement.
- They cannot easily be separated into isolated recruitment and retention approaches.
- Schools with the greatest number of Indigenous medical students have the most comprehensive approach to these strategies.
- Schools with the least numbers of students undertake few strategies and there is little consistency in the ones they choose.
- All current strategies contain gaps and barriers..

This suggests that while some approaches to the recruitment and retention of Indigenous medical students in Australia are comprehensive and individual strategies have elements of best practice, in general the pathways into and through medicine are lacking and unclear. The review of national literature shows that very little has been published on the recruitment and retention of Indigenous medical students for Australian medical schools to draw on.

In comparison to Australia, countries such as New Zealand, Canada and the USA have developed clear policies and approaches to recruitment and retention of Indigenous



medical students and this has led to significant increases in Indigenous medical school enrolments. In particular, these countries have national and local targets, affirmative action strategies, projects, outcomes and evaluations.

5.1.1 Targets and affirmative action

By concentrating efforts and resources, Indigenous student enrolments in medicine have increased in comparative countries and important lessons have been learned.

- the USA Project 3000 by 2000 set a goal to recruit 3000 ethnic minority medical students across the country by the year 2000. Enrolments increased by 27% over three years and while the target of 3000 was not reached, ... *educational partnerships between academic medical centers, colleges, secondary schools and community groups* were maintained and these were ... *found to be key to long term strategies to increase the applicant pool of minority students ready to pursue a career in medicine.*¹⁰²
- In New Zealand, the University of Auckland *Vision 20/20* and *MAPAS* affirmative action strategies and programs have steadily increased the number of Indigenous students entering medicine. Places available to Indigenous medical students had been extended to twenty five by 2003.
- In Canada, the University of Alberta Aboriginal Health Care Careers Program set a mandate to ... *recruit Aboriginal students into the Faculty of Medicine and Dentistry ... in order to correct the under-representation of Aboriginal physicians in 1998 and by 2005, 33 Aboriginal physicians had graduated.*¹⁰³

The targets identified by these comparative countries have in most cases been determined by calculating ratios of Indigenous doctors to the Indigenous population compared to ratios of non-Indigenous doctors to the non-Indigenous population.¹⁰⁴

These observations suggest that Australian medical schools and government need to:

- set a national target for the recruitment and retention of Indigenous medical students; and
- identify the strategies, pathways, principles and actions that will enable them to get there.

This approach is consistent with Objective 5 of the 2002 Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework to

*... include clear accountability for government programs to quantify and achieve these objectives and support for Aboriginal and Torres Strait Islander organisations and people to drive the process.*¹⁰⁵

This objective:

*Recognises that this framework should include accountability through quantifiable and achievable targets to the Objectives. The objective also recognises that there should be support for Aboriginal and Torres Strait Islander peoples to drive the process of achieving the Framework's objectives.*¹⁰⁶

The Australian Health Ministers' Advisory Council also acknowledges

*... the task of developing a methodology for nationally consistent formulation of indicative workforce ratio targets.*¹⁰⁷

The task of developing a methodology for a nationally consistent formulation of indicative workforce ratio targets for Indigenous doctors is one that still needs to be comprehensively addressed. Nonetheless, using the AMA calculations of Indigenous doctors in proportion to that of non-Indigenous doctors to population ratios, 50 Indigenous students would need to enrol in medical schools across Australia each year for the next four years and then 100 would need to enrol each year after that to fill the current Indigenous medical workforce shortfall. On this calculation, an extra 350 Indigenous medical students would need to be enrolled in medicine by the year 2010.¹⁰⁸

5.2 Gaps and barriers in the current strategies and ways forward

While some medical schools have been successful in recruiting and retaining Indigenous medical students in comparison to others, all Australian medical schools still need to recruit and retain more to reach levels equal to the non-Indigenous population. This suggests that a comprehensive approach using the current best practice strategies is not in itself enough and the gaps and barriers in these strategies also need to be addressed in order to move forward.

5.2.1 Promoting medical degrees to Indigenous people

Greater efforts to promote medical degrees appropriately to Indigenous people are needed. One of the best practices identified in the findings is when

... medical ... staff build relationships with local Indigenous community members and families and regularly provide information on medicine, higher education and medical courses.

Promotion needs to occur in different media, languages and cultural contexts, and according to a range of age groups. For example, promotion can range from advertising, written information and media, to community engagement and school and university visits, depending on the target audience. It should highlight different pathways to medicine such as bridging/enabling programs, other health/science degrees and quotas, and support services for students, such as Indigenous health support units.



Community engagement and networks

The importance of community engagement is highlighted in the observation by William and Cadet-James, 2000, that

... family and community support was identified as forthcoming only if they were able to perceive the benefits of study for the students and the community and the education process.¹⁰⁹

This suggests that promotional activities need to go beyond primary and high school visits and include promotional activities for the whole community that emphasise the benefits of higher education and medicine in particular. Some medical schools in Australia and New Zealand have also provided ... *opportunities for family members to meet staff* in order to demystify medicine and the admissions process.¹¹⁰

The findings also suggest that promotional activities that focus on networks and partnerships are urgently needed. In particular, partnerships with school career advisors, school principals, the health workforce and other tertiary and vocational education providers need to be developed. New Zealand recruitment strategies include ... *changes to career delivery advice ... and influencing teachers' expectations and attitudes.*¹¹¹ Medical schools need to develop long-term and sustainable partnerships and networks with key individuals, educational institutions, and Indigenous organisations and communities to provide leadership in the recruitment and retention of potential Indigenous medical students. This is also noted in Outcome 6 of the LIME Connection which notes

... the need for quality respectful partnerships with Indigenous communities are critical to quality medical education.¹¹²

Promoting to different age groups

Medical schools with the most effective promotional activities specifically target different age groups:

- school visits by Indigenous medical students, and attending Croc Festivals and Vibe 3 on 3s are most effective for younger students;
- university visits, summer camps and career festivals are more valuable for secondary school students; and
- orientation days, introductory courses and pre-medical and bridging/enabling programs are more useful for attracting mature age students.

To capture potential Indigenous medical students from a range of age groups, promotion activities need to be creative, flexible and opportunistic.

Written and audiovisual information

In comparison to other countries, such as Canada,¹¹³ the amount of appropriate printed and audiovisual information on applying for medicine available for a range of different age and cultural groups, particularly mature age students, in Australia was limited. For example, the UBC recruitment strategies include ... *developing posters highlighting the need for Aboriginal physicians*.¹¹⁴ One Australian university did showcase a new promotional DVD for potential Indigenous medical students at the LIME Connection. The LIME participants responded very positively to the DVD and many indicated a desire to undertake a similar project at their medical schools. Another initiative suggested by Indigenous support workers was the establishment of an interactive recruitment website that provides information on medicine and on applying for a medical degree, and is suitable for a range of age groups.

Overall, the lack of available written and visual promotional information appeared to be linked to confusion over whose responsibility

such initiatives were and where coordination and resources should come from. At one university, the generic Indigenous support unit is expected to produce promotional posters and information for the Indigenous health support unit, using their own budget. For this reason, the Indigenous support unit is reluctant to produce more than the minimum. A number of Indigenous support workers also indicated they would be expected to individually pursue extra promotional initiatives and apply for funding outside the medical school. The need for medical schools to take responsibility for a comprehensive range of promotional methods aimed at encouraging Indigenous people to pursue a career in medicine and providing them with the information to do this was apparent.

Involving current students and doctors

The most effective way of promoting medicine to Indigenous people is to involve current Indigenous medical students and doctors in recruitment activities. For example, the University of British Columbia strategies include ... *Aboriginal medical students visiting high schools and talking to Aboriginal students*.¹¹⁵

However, mentoring and role modelling activities are time consuming and put extra pressure on Indigenous students. They also depend on medical schools having courses and support programs that Indigenous students want to promote. If Indigenous medical students are to be involved in recruitment activities, they need to be able to undertake these voluntarily and be supported in this as part of their medical degree and professional



development. A positive example of involving Indigenous medical students in promotional and personal development activities was provided at the LIME Network where one student made a proud and skilful presentation on their medical school's recruitment and retention strategies. Demands on Indigenous medical students and graduates to attend and make presentations at every school, career festival, community event and meeting on Indigenous medical education issues can easily become excessive. If government and medical schools want to involve Indigenous medical students and graduates in recruitment activities in a genuine and sustainable way, a nationally coordinated professional development and leadership program based on Indigenous medical student recruitment activities may need to be developed. The Doctors Back to School Project developed by the American Medical Association Minority Affairs Consortium is an example of the benefits of this approach.¹¹⁶

5.2.2 Enabling pathways for Indigenous people into medicine

Despite numerous strategies to recruit and retain Indigenous students, pathways into medicine are not clearly defined for Indigenous people and many barriers are encountered. To successfully recruit and retain Indigenous people in medicine, multiple and flexible pathways need to be developed that take into account peoples' life stages, educational and socioeconomic background and cultural context. For example, the University of Newcastle was recognised by AMWAC in 1997 as having the best practices in recruitment and retention of Indigenous medical students due in part to its ... *broadly defined eligibility criteria which takes into account prior disadvantage*.¹¹⁷ These observations are also noted in Outcome 8 of the LIME Connection which notes that

*... continuing to develop co-ordinated multi-faceted strategies at school level for curriculum and student recruitment and retention reform and implementation is of high priority.*¹¹⁸

However, having encouraged potential applicants to consider a career in medicine, it is important not to discourage them from this pathway by allowing inappropriate or unnecessary barriers during the application process to stand in the way. The literature and findings suggest that these barriers include:

- lack of a 'whole-of-school' commitment;
- unclear admissions processes; and
- student socioeconomic issues.

Lack of a 'whole-of-school' commitment

Indigenous people will not successfully pursue a career in medicine if staff and students at the medical school and university do not value them and appreciate their life experiences. Evidence from comparative countries shows that efforts to recruit and retain Indigenous medical students must be underpinned by a genuine commitment to Indigenous issues from the whole of the medical school and government. As NOMS in Canada, note ... [there is a] *need for knowledge and respect of Aboriginal history, culture and tradition*.¹¹⁹ At the University of Auckland, all strategies to recruit and retain Indigenous medical students are underpinned by the Treaty of Waitangi and recognise that ... *significant levels of disadvantage accrue to Maori within the education sector*.¹²⁰ To consolidate commitment from the whole of the medical school staff and students, the Deans of the medical schools need to demonstrate leadership. For example, the UBC recruitment and retention strategies include ... *a proactive Associate Deans of admissions policy committee*. The need for leadership was also noted in the Outcome 2 of the LIME Connection, which stated that

*... leadership among Deans, medical educators, Indigenous community representatives, policy makers and medical colleges and councils is critical.*¹²¹

These observations suggest that an awareness of the educational disadvantages facing many Indigenous students will encourage medical schools to develop multiple pathways for

Indigenous students from an early age through to mature age entry. A whole-of-school commitment to Indigenous issues will provide Indigenous students with the opportunities and comprehensive support they need to successfully apply to medicine and graduate. It will also provide Indigenous staff with the support they need to make these opportunities culturally safe and available. To ensure a whole of school commitment, leadership must be provided by the Deans of Australian medical schools.

Unclear admissions processes

Indigenous people who have been encouraged to pursue a career in medicine can be easily deterred by the process of applying for medicine. Admissions processes begin with alternative entry schemes and quotas, include travel and test costs, the GAMSAT/UMAT, interviews, and premedical and bridging/enabling programs.

Quotas and alternative entry schemes for Indigenous people need to be clearly explained and promoted to the whole community. They also need to send an unambiguous and positive message to potential applicants. The findings show current quota arrangements are unreliable and imply that Indigenous people are taking away places that could go applicants who have applied via mainstream entry. This is a deterrent to Indigenous people who do not want to be seen as receiving 'special treatment'.

The same problem applies for alternative entry. Current alternative entry schemes imply that Indigenous people are being admitted under special arrangements. However, the findings show that while specific Indigenous alternative entry schemes are available, students from many different backgrounds enter medicine under alternative entry and that this mode of entry is becoming more common, particularly as views about what makes a good doctor change. As noted on the Sydney University website

... there are a number of alternative entry schemes designed to allow competition for

*admission by applicants who would otherwise be ineligible, or whose rank is just below the cut-off.*¹²²

Quotas for Indigenous people need to be set at definite extra numbers that identify a minimum number of enrolments each year that cannot go to other students. These quotas need to be protected and alternative entry schemes need to be promoted as a positive way of attracting potentially good doctors to medicine, including Indigenous doctors.

Identification

Different identification requirements can also be confusing for Indigenous applicants into medicine. It is vital that all medical schools articulate their policy on Indigenous identification which is both appropriate and sensitive. By applying the Best Practice Framework in the recruitment and retention of Indigenous medical students, selection processes and outcomes will improve. This will result in a cohort of successful students, strong in identity.

GAMSAT/UMAT and interviews

The process of sitting the GAMSAT/UMAT and attending interviews can be daunting and expensive for Indigenous people. For many Indigenous people, the process of travelling to test centres and sitting tests alone, unprepared and unsupported can be enough to deter them completely. While direct tutoring in the GAMSAT/UMAT may not be appropriate, Indigenous applicants should be able to access information and emotional, financial and practical support through Indigenous health support units prior to sitting the GAMSAT/UMAT and throughout the application process.

However, the findings also suggest the GAMSAT/UMAT may not be inappropriate for Indigenous applicants altogether. To determine if this is the case, it is recommended that these tests urgently be independently reviewed.

Indigenous students have usually been identified by the Indigenous health support units by the time they reach the interview process. Current best practices suggest that Indigenous students perform best when they have been adequately prepared for interviews and are supported by the Indigenous health support units. The findings also suggest that having Indigenous community members present on the interview panel, having a family member attend as a support person, and community-based interviews also make for a more positive experience.

Pre-medical, enabling and bridging programs

Pre-medical, enabling and bridging programs need to be promoted to Indigenous people as a positive way of entering into medicine. These courses help to prepare students for the demands of a medical degree and provide them with the opportunity strengthen their skills in particular areas. However, evidence from the literature shows that Indigenous people in general are more likely be enrolled in enabling, non-award courses rather than in higher degrees.¹²³ Medical schools therefore need to judiciously use enabling courses. They also need to provide Indigenous students with pathways that map their exit from enabling courses and entry into and completion of medical degrees.

5.2.3 Appropriately supporting Indigenous people in medicine

Support for Indigenous people in medicine needs to be holistic and encompass students social, emotional, cultural and practical needs as well as academic and learning ones. These needs include:

- cultural safety and curriculum;
- mentoring and collegiate support;
- financial and practical resources;
- tutoring and academic support; and
- professional development.

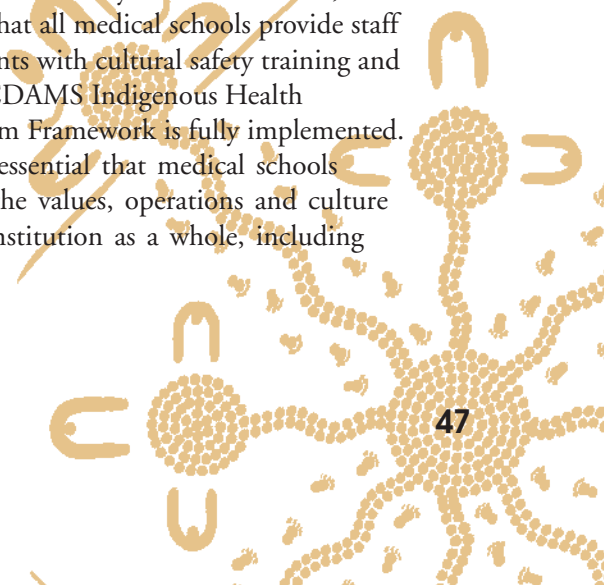
Cultural safety and curriculum

Indigenous students regularly experience racism and discrimination, particularly in relation to misperceptions from students and staff that they are receiving special treatment. Anecdotal evidence also suggests that Indigenous entry requirements can sometimes be more rigorous than the non-Indigenous entry process. Regardless of entry points, all medical students have to pass the same assessments during their study. Medical schools need to actively examine and address the admissions processes, myths and stereotypes that have allowed these misperceptions to flourish and encourage Indigenous students to express and celebrate their culture, and family and cultural obligations in a safe and supportive environment.

The beliefs, attitudes, policies and practices of tertiary institutions can often act as barriers to higher education for Indigenous students. Developing and maintaining a culturally safe environment is important in recruiting and retaining Indigenous Australians in medicine, and retaining Indigenous staff in the universities. To achieve this, it is essential for all staff and students within medical and health faculties to understand their own cultural identity, attitudes, values and actions; and how these impact on others around them. For example, the NOMS recruitment and retention strategies are to

... target potential Aboriginal students and [expose] non-Aboriginal students to Aboriginal issues and communities as part of the academic and clinical curriculum from first year.¹²⁴

To ensure a culturally safe environment, it is essential that all medical schools provide staff and students with cultural safety training and that the CDAMS Indigenous Health Curriculum Framework is fully implemented. It is also essential that medical schools examine the values, operations and culture of their institution as a whole, including



management and decision-making processes. To ensure cultural safety is comprehensively adopted in medical schools, commitment is required at a number of levels. Management, organisational, budgetary and decision-making processes should incorporate Indigenous participants and perspectives. This will not only assist in providing safe environments for Indigenous students but will also contribute to the creation of a culturally competent medical professional workforce.

Mentoring and collegiate support

Indigenous students highly value mentoring and collegiate support, and actively seek out opportunities to participate in these activities. This is supported by evidence from comparative countries (e.g. the University of Auckland supports Indigenous students and graduates mentoring other Maori and Pacific students).¹²⁵ The tendency to seek out a mentor rather than be allocated one and confusion about mentoring and role modelling provide important lessons for the development of mentoring programs for Indigenous medical students.

The opportunities to speak honestly about issues in a non-judgmental collegiate environment also sheds important light on the kinds of support Indigenous students are seeking. As noted in a study on Indigenous students in Queensland ... *the support of fellow students was an important resource, both during and after the completion of study.*¹²⁶ In particular, these observations suggest that Indigenous students need to feel safe and in control of the supports that are available to them. This suggests that mentoring relationships need to be culturally safe and based on a two-way relationship and exchange between equals.¹²⁷ Indigenous students need to be supported in a way that respects their unique skills, perspectives and life experiences. While AIDA is currently developing and implementing a mentoring program based on these principles, institutions should also consider developing local mentoring programs.

Financial and practical resources

Evidence from the literature and findings clearly show that many Indigenous people come from disadvantaged backgrounds and that financial difficulties can impact on Indigenous medical students during their degree. As noted in the 2003 *Overcoming Indigenous Disadvantage Report ... there is a strong correlation between low income families and lower scores in learning outcomes.*¹²⁸ Many Indigenous medical students also have family obligations, travelling and accommodation costs that impact on their financial situation. Hence, Indigenous students are more likely than other medical students to need financial support and other resources to ensure they have the same opportunities to complete their medical degrees. Medical schools and government also need to be realistic about how much it costs to undertake a medical degree, given that students are usually required to live away from home and have little time for extra employment.

Adequate scholarships, bursaries and grants that do not negatively impact on students' government payments need be accessible. This may be partly achieved through equipment grants that assist Indigenous students to purchase academic texts, computers, medical equipment and so on, without affecting their Abstudy payments. Two medical schools that currently demonstrate best practices in the recruitment and retention of Indigenous medical students also provide access to significant medical-specific yearly scholarships for all their students. One of these scholarships is provided by the state health department to all Indigenous medical students. The other is provided directly out of medical school funds. If medical schools and government are genuine about recruiting and retaining Indigenous medical students, fully funded medical places and full scholarships should be provided to all Indigenous medical

students, as recommended by the AMA.¹²⁹ Partnerships also need to be developed with philanthropic, non-government organisations and corporate bodies that may have access to other financial and practical supporting resources.

Academic and transitional support

Tutoring and academic support is necessary for most medical students, whether Indigenous or not.¹³⁰ However, the findings show that most Indigenous students need to access this support through the ITAS rather than privately or through mainstream services. Current ITAS arrangements are complex and time consuming and clearly deter Indigenous students who are seeking tutoring support specific to medicine. It is clear from the findings that ITAS requirements need to be urgently reviewed to provide more appropriate support for Indigenous medical students.

Medical students in general often seek out extra academic and clinical support to improve specific skills and finetune techniques for medical exams. However, Indigenous medical students who want to improve in particular areas may feel more comfortable seeking support in collegiate groups. Some Indigenous health support units provide

... tutorial rooms specifically for Indigenous health and medical students and tutorial and other assistance with preparing for assessments and exams.

Some Indigenous health support units offer intensive support to Indigenous students in the first few years of their degrees to deal with transitional issues and prior educational and other disadvantages. However, providing a positive first year experience is not unique to Indigenous students.

- The University of Queensland has developed a strategy to provide extra support to all first year students, by understanding that *... to engage first year students, the university must be able to assist them to deal with their social and educational transition.*¹³¹

- The University of Newcastle provides intensive support to Indigenous medical students in the first few years of their degree as one of their retention strategies.
- The University of Western Australia medical staff provide weekend clinical workshops for Indigenous students in a culturally safe environment.

Culturally safe support arrangements provide Indigenous students with valuable opportunities to perform at their optimal level in their medical degrees.

Professional development

The findings indicate Indigenous medical students feel pressured to pursue careers in Indigenous health and are less likely to undertake further vocational training. Indigenous medical students feel

*... pressure to go back and practice only in Indigenous communities or organisations both from their own community and the wider community.*¹³²

This pressure may be due to narrow views and misperceptions about the value of Indigenous doctors, that imply their contribution lies in directly working in Indigenous communities. While this may encompass the aspirations of some graduates, a wider and more sophisticated view of the value of Indigenous doctors needs to be encouraged, highlighting their value as role models, mentors and leaders in their community as well as their highly skilled, holistic and unique contribution to medicine in a range of areas. In this respect, professional development opportunities for Indigenous medical students that include presenting at schools, university orientation activities and conferences may assist them to make more confident and ambitious career choices, while having the added effect of encouraging other Indigenous people to pursue a career in medicine.

5.3 Recruitment and retention of Indigenous medical students is everybody's business

The significant task of recruiting and retaining Indigenous students in medicine should not be delegated only to Indigenous health support units and Indigenous staff. The findings strongly indicate that Indigenous staff are already overworked and expected to 'do it all'. Most Indigenous health support units do not have the resources to undertake all promotional, supporting, cultural training, and teaching activities for Indigenous and non-Indigenous students and staff without support from the wider Medical Faculty. To ensure a culturally safe environment for Indigenous medical students, all medical school staff and students need to value Indigenous people and be involved in their recruitment and retention. Medical schools that have genuinely embraced Indigenous medical education and recruitment and retention of Indigenous medical students have benefited from this process on many levels including the:

- wisdom, knowledge and richness that Indigenous cultural perspectives, experiences and people bring to the medical course and environment;
- Indigenous holistic views of good health as including the physical, social, emotional, cultural and spiritual wellbeing of the whole community;
- influencing concepts about what makes a good doctor and constitutes good medical practice; and
- opportunity to make a practical and humanitarian contribution to addressing the Indigenous health and education crisis and the sense of pride, respect and empowerment that comes from this.

Indigenous staff need to be employed, valued and supported and Indigenous health support units need to be amply resourced to guide medical schools in the implementation of

appropriate recruitment and retention of Indigenous students, and to develop comprehensive Indigenous health curriculum frameworks. This includes providing professional development opportunities for Indigenous staff, such as those available to Maoris which include

*... increasing the levels of [Indigenous] staff participation in research and publication including support for innovative research ... and ensuring [Indigenous] participation in key aspects of the management structures and institutional life of the University.*¹³³

5.4 Summary

It is apparent that many national, state and institutional policies and strategies said to assist Indigenous people have failed. This is evident in the fact that the gap in mortality rates between Indigenous and non-Indigenous Australians remains at 20 years while in other comparative countries it has significantly fallen. As noted in the CDAMS Indigenous Health Curriculum Framework

*... a convincing case has been made that the health and wellbeing of Indigenous peoples in Canada, the US and New Zealand is strengthened by having their sovereignty recognised and having control over their own health care service delivery.*¹³⁴

Australian governments and medical schools need to seriously consider what these observations and those discussed above mean for the success of Indigenous medical student recruitment and retention strategies. The Best Practice Framework therefore provides Australian governments and medical schools with a framework, including targets and principles and actions, that will assist in this process.

6. FRAMEWORK

The *Healthy Futures* Best Practice Framework has been developed for Australian medical schools, governments and principal stakeholders to improve recruitment and retention strategies for Indigenous medical students. The framework provides a foundation for individual institutional responses that are locally relevant, flexible and action oriented. The successful implementation of this framework will clearly require additional and adequate resourcing.

The Best Practice Framework is made up of three headline targets for 2010 and five interrelated principles.

Headline targets

By 2010:

- Australian medical schools will have established specific pathways into medicine for Indigenous Australians.
- CDAMS Indigenous Health Curriculum Framework will be fully implemented by Australian medical schools.
- There will be 350 extra Indigenous students enrolled in medicine.¹³⁵

Principles

- All Australian medical schools and principal stakeholders have a social responsibility to articulate and implement their commitment to improving Indigenous health and education; and must
- make the recruitment and retention of Indigenous medical students a priority for all staff and students and show leadership to the wider university community;
- ensure cultural safety and value and engage Indigenous people in all their work;
- adopt strategies, initiate and coordinate partnerships that open pathways to medicine from early childhood through to vocational training and specialty practice; and
- ensure all strategies for Indigenous medical student recruitment and retention are comprehensive, long term, sustainable, well resourced, integrative and evaluated.

Principle 1

All Australian medical schools and principal stakeholders have a social responsibility to articulate and implement their commitment to improving Indigenous health and education; and must

As a distinguished and respected profession known for both its objectivity and compassion, medicine is in a prominent position to lead Australia in its efforts to act on the crisis in Indigenous health and education. Medical organisations, schools and colleges across Australia know that Indigenous doctors provide a highly skilled, professional and unique contribution to the Australian medical workforce.

Actions

- Implement the Best Practice framework
- Implement the CDAMS Indigenous Health Curriculum Framework
- Provide a variety of financial incentives for Indigenous medical students
- Provide and protect identified medical places for Indigenous students
- Provide adequate resourcing for Indigenous health support units
- Record and evaluate achievements in improving medical education outcomes for Indigenous students

Principle 2

Make the recruitment and retention of Indigenous medical students a priority for all staff and students and show leadership to the wider university community

The Deans of medical schools and all their staff and students must demonstrate their commitment to Indigenous health and education by actively participating in Indigenous student recruitment and retention strategies and showing leadership to the wider university community. Indigenous staff and community members must be empowered to determine and lead these efforts and delegate responsibilities as needed.

Actions

- Value and encourage the contribution that Indigenous people bring to medicine
- Develop and maintain meaningful partnerships with Indigenous communities and health services under the guidance of Indigenous staff
- Support Indigenous applicants in preparing for and undertaking entry requirements in to medicine
- Develop and implement culturally appropriate promotional material to recruit Indigenous students
- Provide administrative, academic and emotional support to Indigenous students
- Provide administrative, academic and emotional support to Indigenous staff and ensure they have time to pursue their own professional development
- Be positive role models and mentors for Indigenous students and staff

Principle 3

Ensure cultural safety and value and engage Indigenous people in medical school business

Medical school staff and students have a responsibility to examine and challenge their attitudes, beliefs and practices towards Indigenous Australians if they intend to work as health professionals. This will benefit all Australians both delivering and receiving health and education services.

Actions

- Establish cultural safety training for all staff and students
- Take affirmative action against racism and discrimination
- Establish an Indigenous advisory committee
- Employ adequate numbers of full time Indigenous staff and ensure they are well resourced and appropriately supported and represented in the management structure
- Engage local Indigenous people in recruitment, retention and teaching activities
- In partnership with Indigenous communities, provide practical and cultural learning opportunities and experiences

Principle 4

Adopt strategies, initiate and coordinate partnerships that open pathways to medicine from early childhood through to specialty practice

Flexible entry and articulation pathways need to be developed and promoted. Recruitment strategies should target and provide support to potential Indigenous medical students at different life stages including primary and secondary school and mature age.

Actions

- Establish and maintain strong working partnerships with local/regional schools, technical colleges, the Indigenous health workforce and other university disciplines to ensure that potential Indigenous medical students are identified and encouraged
- Undertake regular recruitment activities at local schools, communities, health services and other educational institutions
- Involve current medical students in Indigenous recruitment activities
- Encourage Indigenous medical students and graduates to act as role models and participate in mentoring programs
- Provide university orientation opportunities, summer camps, bridging and premedical programs that are targeted at a range of age groups and educational levels
- Tailor admissions and alternative entry requirements for Indigenous students and provide support for applicants through this process
- Provide financial support for Indigenous people to cover costs associated with applying for medicine

Principle 5

Ensure all strategies for Indigenous medical student recruitment and retention are comprehensive, long term, sustainable, well resourced, integrative and evaluated

The recruitment and retention of Indigenous medical students requires long-term commitment and strategic partnerships from Australian governments, medical schools and the wider community.

Actions

- Consistent with the Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework (2002) and taking account of this framework, develop and implement a comprehensive Indigenous recruitment and retention policy
- Establish Indigenous recruitment and retention plans and strategies
- Provide financial and human resources to ensure that recruitment and retention plans and strategies remain open and flexible
- Conduct ongoing evaluation of the Indigenous recruitment and retention plans and strategies

ATTACHMENT A

Survey forms and questions



The Australian Indigenous Doctors' Association
Yaga Bugaul Dungun

PO BOX 3497 MANUKA ACT
Ph: 02 6239 5013 Fax: 02 6239 5014
<www.aida.org.au>

SURVEY OF ABORIGINAL AND TORRES STRAIT ISLANDER MEDICAL STUDENTS

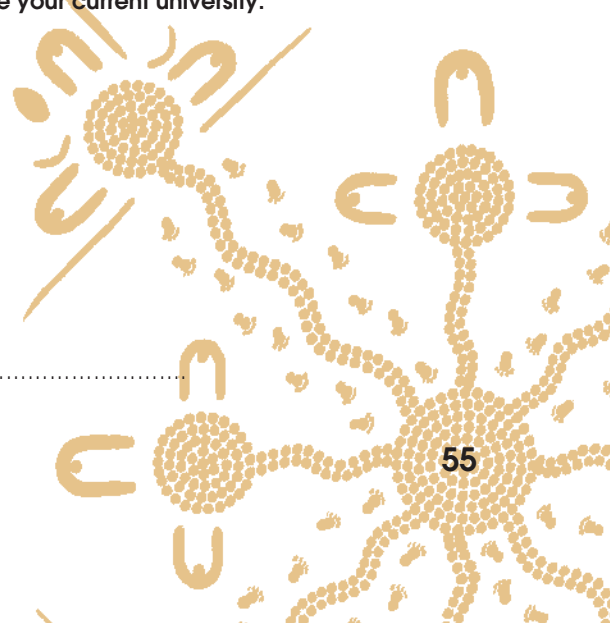
The Australian Indigenous Doctors Association (AIDA) is undertaking a project to identify best practice models in the recruitment, retention and graduation of Aboriginal and Torres Strait Islander students. This survey of Aboriginal and Torres Strait Islander medical students will help us to identify some of the advantages and disadvantages of current approaches.

Your response will be treated with **complete confidentiality**. If any question is too difficult to answer or if there is any question you do not wish to answer, you may pass on to the next question. The survey should only take approximately 5 to 10 minutes to complete (longer if you write comments).

Please complete the form and return to AIDA, PO Box 3497, Manuka, ACT, 2603

Fax 02 2395014. Please email aida@aida.org.au if want more information.

1. **At which university are you currently studying?**
2. **What year of study are you in currently?**
3. **What is the level of your course?**
 - Undergraduate
 - Postgraduate
4. **What year did you first enrol in your present course?**
5. **Please tick on or many options to indicate why you chose your current university.**
 - Indigenous Support Unit
 - Bridging/Enabling Courses
 - Financial Reasons
 - Close to home
 - Word of mouth
 - Family has attended
 - Friends told you about the course
 - Easier to gain entry than other universities
 - Advertised
 - Other



6. Is there another University where you would prefer to study?

- Yes
- No

Why?

7. What types of support do you need/want from an Indigenous Support Unit?

8. Are you getting the support you need from the Indigenous Support Unit?

- Yes
- No

Please comment:

9. In your experience, does the Indigenous Support Unit have enough resources?

- Yes
- No

Please comment:

10. Are you receiving appropriate support from the University/Faculty?

- Yes
- No

Please comment:

11. Do you have a mentor?

- Yes
- No

Please comment

12. Are there any comments you would like to make on the recruitment of Aboriginal and Torres Strait Islander medical students?

13. Would you prefer a central admission process for Indigenous Medical Students?

- Yes
- No

OR regional admissions?

- Yes
- No

Please comment

14. Is there any reason why you would stop studying to be a medical doctor?

15. What reasons do you have to continue studying to be a medical doctor?

16. Do you have any problems with the form of assessment of grades for medical students?

- Yes
- No

Please comment

17. Please comment on the process used by the medical school for identifying Aboriginal and/or Torres Strait Islander students.

18. Do you feel that your confidence has improved since becoming a medical student?

- Yes
- No

Please comment

19. Would you prefer to do group work with other Indigenous students?

Yes

No

Please comment

20. Please comment on the Aboriginal and Torres Strait Islander content in the curriculum?

21. What contributions do you feel the medical community and broader university community benefit from you?

22. Have you personally experienced any discrimination or negativity from other students, residents, professors or physicians?

Yes

No

If you answered yes to any of the above two questions, please describe briefly what happened.

23. What have been the biggest rewards so far in pursuing your medical career?

24. What have been the biggest challenges so far in pursuing your medical career?

25. What are the main issues facing Aboriginal and Torres Strait Islander people in medicine today?

26. What changes, if any, would you like to see for Aboriginal and Torres Strait Islander people in medicine now and in the future?

-OPTIONAL-

Would you be available to be interviewed by AIDA for this project

Yes

No

Would you like more information about the Australian Indigenous Doctors Association?

Yes

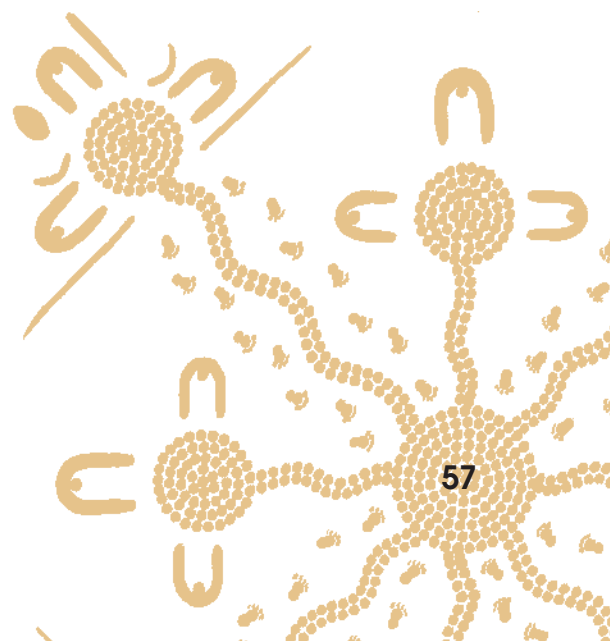
No

NAME:

ADDRESS:

EMAIL:

Thank you for participating in this survey. Your answers are very important and we look forward to sharing the overall results with you





The Australian Indigenous Doctors' Association
Yaga Bugaul Dungun

PO BOX 3497 MANUKA ACT

Ph: 02 6239 5013 Fax: 02 6239 5014

<www.aida.org.au>

The Australian Indigenous Doctors' Association (AIDA) is undertaking a project to identify best practice in the recruitment of and support for Aboriginal and Torres Strait Islander medical students. Your assistance during this project is appreciated and will assist with ensuring that Indigenous medical students receive the support, information and care required to complete their tertiary studies and ultimately increase the number of Indigenous doctors required to meet the health needs of Aboriginal and Torres Strait Islander Australians.

Your response will be treated with **complete confidentiality**. If any question is too difficult to answer or if there is any question you do not wish to answer, you may pass on to the next question. The survey should only take approximately 5 to 10 minutes to complete (longer if you write comments).

Please complete the form and return to AIDA, PO Box 3497, Manuka, ACT, 2603

Fax 02 2395014. Please email aida@aida.org.au if want more information.

-
1. **Why did you choose to become a doctor?**
 2. **Was there a particular person or incident that influenced your decision to become a doctor?**
 3. **Which university did you complete your studies?**
 4. **What year did you graduate?**
 5. **Did you identify as an Aboriginal and/or Torres Strait Islander medical student?**
 - Yes
 - No
 6. **Did you have an Indigenous Support Unit at the University you studied?**
 - Yes
 - No
 7. **What sort of support do you believe Aboriginal and Torres Strait Islander medical students need:**
 8. **What types of difficulties did you face while studying:**
 - Academically:
 - Socially:
 - Family:
 9. **Financially were you supported by ABSTUDY?**
 - Yes
 - No
- Or did you have a scholarship?**
- Yes
 - No

10. Did you work or study before you became a Medical Student?

- Yes
- No

Please state

11. Did you work whilst a medical student?

12. Did you or have you deferred training?

- Yes
- No

If YES why?

- Research
- Personal
- Financial
- Other

13. What have been the biggest rewards so far in pursuing your medical career?

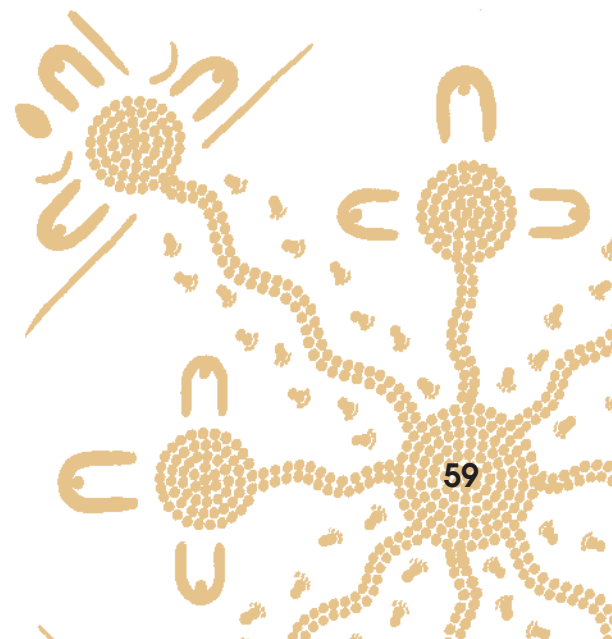
14. What have been the biggest challenges so far in pursuing your medical career?

15. What are the main issues facing Aboriginal and Torres Strait Islander people in medicine today?

16. What changes, if any, would you like to see for Aboriginal and Torres Strait Islander people in medicine now and in the future?

.....

Thank you for participating in this survey. Your answers are very important and we look forward to sharing the overall results with you





The Australian Indigenous Doctors' Association
Yaga Bugaul Dungun

PO BOX 3497 MANUKA ACT

Ph: 02 6239 5013 Fax: 02 6239 5014

<www.aida.org.au>

The Australian Indigenous Doctors' Association (AIDA) is undertaking a project to identify best practice in the recruitment of and support for Aboriginal and Torres Strait Islander medical students. Your assistance during this project is appreciated and will assist with ensuring that Indigenous medical students receive the support, information and care required to complete their tertiary studies and ultimately increase the number of Indigenous doctors required to meet the need health needs of Aboriginal and Torres Strait Islander Australians.

Your response will be treated with **complete confidentiality**. Could you please complete the survey to the best of your knowledge. If you are unsure of certain questions please state so and any difficulties you may have finding the information.

Please complete the form and return to AIDA, PO Box 3497, Manuka, ACT, 2603

Fax 02 2395014. Please email aida@aida.org.au if want more information.

INSTITUTION :

SCHOOL:

NAME:

1. Does the University have a set number of places for Aboriginal and Torres Strait Islander medical students?
2. Does the University offer a bridging course for Aboriginal and Torres Strait Islander students medical students?
3. How many Aboriginal and Torres Strait Islander medical students do you intake in a total year?
4. a. Does the School/University keep records of the number of Aboriginal and Torres Strait Islander student who do not graduate?
 Yes
 No
If yes how many Aboriginal and Torres Strait Islander medical student have not graduated but have enrolled in the Medicine Program?
b. How many Aboriginal and/or Torres Strait Islander students are currently enrolled?
c. How many in each year: 1st.....2nd3rd4th5th
d. How many have graduated in total?
e. What is the average time to graduate?

5. a. What sort of support does the University/School have in place for Aboriginal and/or Torres Strait Islander medical students i.e. Tutoring, Indigenous Support Unit (ISU), computer facilities etc.
- b. If the University has an ISU please briefly state what the unit comprises of i.e. staff, space etc. specific for Medicine.
- c. If the University does not have a specific support unit for Aboriginal and Torres Strait Islander medical students is there a broader Indigenous support unit for staff to access knowledge about cultural awareness?
- Yes
- No

Please comment:

6. Does the University/School produce any reports regarding Aboriginal and Torres Strait Islander medical students?
- Yes
- No

7. a. Does the University/School conduct recruitment workshops at:
- Primary School
- High School
- Communities
- Other

b. Does the Medical School advertise through Indigenous specific media?

- Yes

Where

- No

c. What recruitment strategies are most successful? Why?

d. What recruitment strategies are less successful? Why?

e. Does the School receive specific funding for recruitment/promotional activities?

- Yes
- No

If you receive funding is the funding:

- Continual
- One-off
- Annual submission
- Other

f. Would the Universities/Schools admissions process be easier if there was a central admissions for Aboriginal and Torres Strait Islander medical students?

- Yes
- No

Or Regional admissions?

- Yes
- No

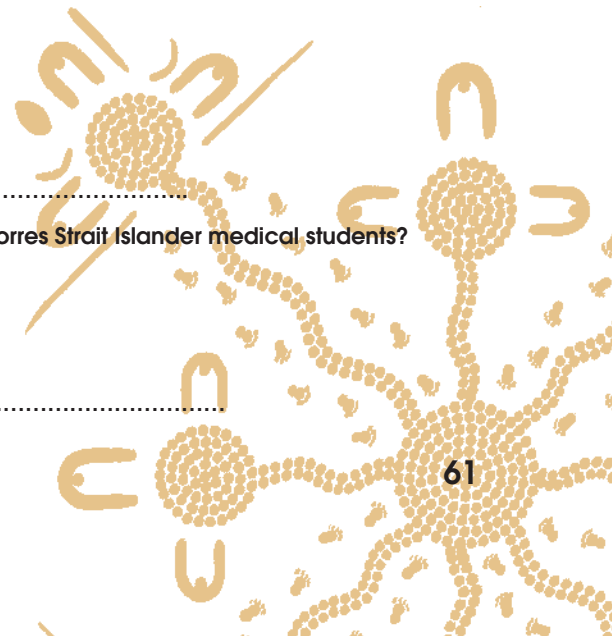
Please comment

8. How does the University/School identify Aboriginal and Torres Strait Islander medical students?

Does think this works?

- Yes
- No

If no any suggestions



9. a. Please list the types of assessment used to assess medical students.

b. Do you know if Aboriginal and Torres Strait Islander medical students have problems with certain types of assessment?

- Yes
- No

If yes please identify which assessments:

c. does this differ from non-Indigenous students?

- Yes
- No

Comment:

10. Does the School have specific scholarships available for Aboriginal and Torres Strait Islander medical students?

- Yes
- No

Please detail the scholarship.

11. Has the School developed or is the School developing partnerships/links with Aboriginal and Torres Strait Islander communities/organisations? In what capacity?

12. How many Aboriginal and/or Torres Strait Islander staff does the School currently employ? (Academic and General)

.....

Thank you for participating in this survey. Your answers are very important and we look forward to sharing the overall results with you

REFERENCES

- Adams D. Doctors hope to inspire by school visits. *American Medical News* Apr 15, 2002;45(15):11–12. Accessed 04/08/04. <http://gateway.proquest.com.gateway.library.qut.edu.au/openurl?url_ver=Z39.88-2004&zres_dat=xri:pqd&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&rft_dat=xri:pqd:did=000000113705755&svc_dat=xri:pqil:fmt=html&req_dat=xri:pqil:pq_clntid=14394>.
- Adams K. *No Shame Job; A Health Career Information Guide for Indigenous Students*. Canberra: Commonwealth of Australia, 1999.
- Australian Council for Educational Research. *Information Booklet. UMAT*. Camberwell, Victoria: ACER, 2004a.
- Australian Council for Educational Research. *GAMSAT: Information Booklet*. Camberwell, Victoria: ACER, 2005.
- Australian Council for Educational Research. *GAMSAT: Information Booklet 2005*. Camberwell, Victoria: ACER, 2004b.
- Australian Council for Educational Research. *Example Questions*. Accessed 03/01/05. <www.acer.edu.au/tests/university/umat/documents/UMATexamplequestions2004.pdf>. Camberwell, Victoria: ACER, 2004c.
- Australian Government. Department of Foreign Affairs and Trade website. *Indigenous Programs: Education, Health and Housing*. Accessed 29/09/04. <www.dfat.gov.au/facts/indg_education.html>.
- Australian Health Ministers' Advisory Council. *Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework*. Canberra: AHMAC, May 2002.
- Australian Indigenous Doctors Association website. Accessed December 2004. <www.aida.org.au>.
- Australian Institute of Health and Welfare. *Health and Community Services Labor Force. National Health and Labor forces*, 2001;27.
- Australian Institute of Health and Welfare. *National summary of the 2001 and 2002 jurisdictional reports against the Aboriginal and Torres Strait Islander health performance indicators*. AIHW cat. no. IHW 12. Canberra: AIHW, 2004.
- Australian Institute of Health and Welfare. *Perinatal Mortality*. Accessed 30/03/05. <www.aihw.gov.au/indigenous/health/mortality.cfm>. Canberra: AIHW, 2005.
- Australian Medical Association. *Public Report Card. Aboriginal and Torres Strait Islander Health. Time For Action*. Canberra: AMA, 2003.
- Australian Medical Association. *Healing Hands: Aboriginal and Torres Strait Islander Workforce Requirements*. Discussion paper. Canberra: Aboriginal and Torres Strait Islander Health, 2004.
- Australian Medical Workforce Advisory Committee. *Characteristics of students entering Australian Medical Schools 1989 to 1997*. AMWAC Report 1997.7 AIHW cat. HWL 6 December 1997. Canberra: AIHW, 1997.
- Barrett S. The work/study dilemma: A pilot study. Accessed 21/03/05. <<http://ehlt.flinders.edu.au/education/iej/articles/v1n2/barrett/begin.htm>>. *International Education Journal* 2000;1(2): 127–137.
- Bourke E, Farrow R, McConnochie K, Tucker A. *Career Development in Aboriginal Higher Education*. South Australia: University of South Australia. Department of Employment, Education and Training, Evaluations and Investigations Program. Canberra: Australian Government Publishing Service, 1991.

- British Medical Association. Medical students – widening participation in medical schools. Accessed 26/04/05. <<http://222.bma.org.uk/ap.nsf/Content/Medstudparticipation>>. BMA, October 2004.
- Charles Sturt University. Ngungilanna - Wagga Wagga. Koori Specific Health Careers Residential Workshop. Accessed 2/08/04. <www.csu.edu.au/division/iec/body.htm>. Wagga Wagga: CSU, 2004.
- Christensen P, Lilley I. The Road Forward? Alternative Assessment for Aboriginal and Torres Strait Islander Students at the Tertiary Level. Queensland: Aboriginal and Torres Strait Islander Studies Unit, University of Queensland. Evaluations and Investigations Program; Canberra: Higher Education Division. Department of Employment, Education, Training and Youth Affairs, 1997.
- Clarke JA, Bull DD, Clarke JR. USQ's Tertiary Preparation Program (TPP): More Than 15 Years of Evolution in Distance Preparatory/Bridging Programs. The Factors Influencing Preparatory Program Development at USQ: 1985-2004. Toowoomba: University of Southern Queensland.
- Commonwealth Department of Education, Science and Training, National Report to Parliament on Indigenous Education and Training. Canberra: DEST, 2003.
- Commonwealth Department of Education, Science and Training. Characteristics and Performance Indicators of Australian Higher Education Institutions, 2000. Occasional Papers Series. Higher Education Division. Canberra: DEST, 2001.
- Commonwealth Department of Education, Science and Training. Indigenous Education: Achievement through choice and opportunity. Australian Government Indigenous Specific Funding for the 2005-2008 Quadrennium. Discussion Paper. Canberra: DEST.
- Commonwealth Department of Education, Science and Training. Higher Education Report for 2003-2005 Triennium. Canberra: Department of Communications, Information Technology and the Arts.
- Commonwealth Department of Education, Science and Training. Which Course? Which University? Undergraduate Characteristics. Undergraduate Characteristics. Health. Medicine. Accessed 30/09/04. <www.dest.gov.au/tenfields/health/under.html#MEDICINE>. Canberra: DEST.
- Couzos S, Murray R. Aboriginal Primary Health Care. An Evidence-based Approach. 2nd ed. Melbourne: Oxford University Press, 2003.
- Crump J. Northern med school prioritizes aboriginal health. Medical Post Toronto Mar 16, 2004;40(11):63. Accessed 02/08/04. <http://gateway.proquest.com.gateway.library.qut.edu.au/openurl?url_ver=Z39.88-2004&res_dat=xri:pqd&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&rft_dat=xri:pqd:did=000000618720691&svc_dat=xri:pqil:fmt=text&req_dat=xri:pqil:pq_clntid=14394>.
- Department of Aboriginal and Torres Strait Islander Policy. Protocols for Consultation and Negotiation with Aboriginal People. Brisbane: DATSIP, 1999.
- Department of Education, Training and Youth Affairs. Indigenous Participation in Higher Education. Occasional Paper Series. Canberra: DETYA, Higher Education Division, 2000.
- Department of Employment, Education and Training. National Board of Employment, Education and Training. A Fair Chance for All. National and Institutional Planning for Equity in Higher Education. A Discussion Paper. Canberra: AGPS, February 1990.
- Department of Education, Science and Training. Students, Selected Higher Education Statistics. Table: All Aboriginal and Torres Strait Islander Medical Students by State and Institution 2001-2003. University Statistics Unit. Student Support Branch. Higher Education Group. Email 2004.
- Fred Hollows Foundation website. Indigenous Health in Australia. The Health Emergency. Accessed 15/09/04. <www.hollows.org>.

- Garvey G, Atkinson D. What Can Medical Schools Contribute to Improving Aboriginal Health? *New DOCTOR Summer 1998/9*;70. Doctors Reform Society of Australia. Accessed 04/08/04. <www.drs.org.au/journal/70/70medic.htm>.
- Garvey G, Brown N. Project of National Significance Final Report: Aboriginal Health A Priority for Australian Medical Schools, Newcastle: The Discipline of Aboriginal Health Studies Faculty of Health, University of Newcastle, 1999a.
- Garvey G, Rolfe E, Pearson S. Agents for Social Change: the University of Newcastle's Role in Graduating Australian Aboriginal Doctors. Newcastle: Faculty of Medicine and Health Sciences, University of Newcastle, 2000.
- Haley L. 5% of enrolment spots should be filled by Natives: UBC dean. *Medical Post Toronto*: Aug 21, 2001;37(28):2. Accessed 02/08/04. <<http://proquest.umi.com.ezp01.library.qut.edu.au/pqdweb?did=358597911&sid=2&Fmt=3&clientId=14394&RQT=309&VName=PQD>>.
- Hopkins Tanne J. US medical schools should consider race in admitting student. *British Medical Journal* Sep 14, 2002;325(7364):565. Accessed 02/08/04. <<http://proquest.umi.com.ezp01.library.qut.edu.au/pqdweb?did=202302941&sid=4&Fmt=4&clientId=14394&RQT=309&VName=PQD>>.
- Human Rights and Equal Opportunity Commission. *Bringing Them Home: Report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from Their Families*, Sydney: Australasian Legal Information Institute, 1997.
- Indian Health Service. *Trends in Indigenous Health 1998-99*. Maryland: Indian Health Service. Department of Health and Human Services.
- Jefferies R. *Maori Participation in Tertiary Education: Barriers and Strategies to Overcome Them*. Wellington: Te Puni Kōkiri, the Ministry of Maori Development, 1999.
- Kiwi Careers website. Doctors. Industry Overview. Accessed 02/08/04. <www.kiwicareers.govt.nz/industry/i3_heai3c_doc.htm>.
- McClelland A, Topley J. Tertiary Admission for School-Leavers with non-conventional Secondary Schooling. The need for a comprehensive alternative admissions process to enable 16-19 year olds to obtain a TER based on non-conventional evidence. Brisbane, Australia: Queensland Tertiary Admissions Centre Ltd, 2002.
- Mellor S, Corrigan M. *The Case for Change: A review of contemporary research on Indigenous Education Outcomes*. Accessed 02/08/04. <www.acer.edu.au/news/documents/TheCaseforChange.pdf>.
- National Aboriginal and Torres Strait Islander Health Council. *National Strategic Framework for Aboriginal and Torres Strait Islander Health, Framework for Action by Governments*, July 2003.
- National Indigenous Postgraduate Association Aboriginal Corporation. *Budget Outcomes: Outcomes in the 2003 Federal Budget for Aboriginal and Torres Strait Islander Postgraduate students*. NIPAAC, May 2003.
- Parliament of the Commonwealth of Australia. *Health is Life. Report on the Inquiry into Indigenous Health*. House of Representatives Standing Committee on Family and Community Affairs. Canberra: CoA, May 2000.
- Phillips G. *Committee of Deans of Australian Medical Schools Indigenous Health Curriculum Framework*. Melbourne: VicHealth Koori Health Research and Community Development Unit, 2004.
- Queensland School Curriculum Council. *Aboriginal and Torres Strait Islander Education 2001-2002: Forum Report*. Brisbane: Queensland Studies Authority, 2002.
- Queensland University of Technology. *Achieving equitable and appropriate*

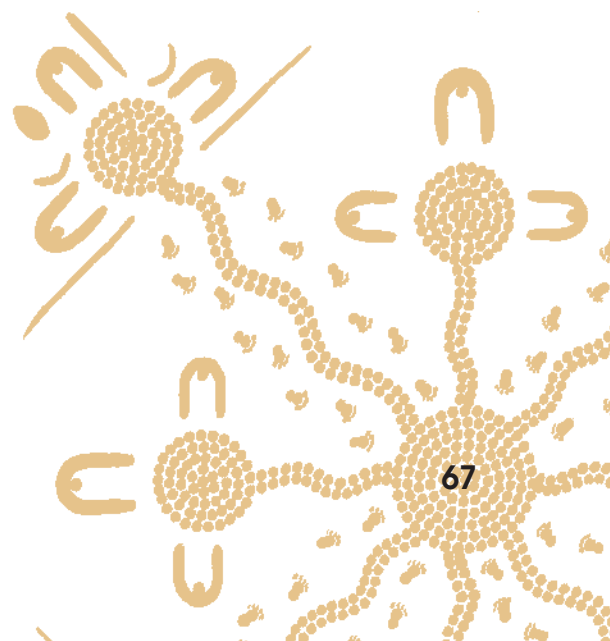
- outcomes: A response to the Australian Governments review of Australia's high education system: Higher Education at the Crossroad. Accessed 04/08/04. <www.backingaustraliasfuture.gov.au/submissions/issues_sub/pdf/i304.pdf>. Brisbane: QUT, 2002.
- Ramsden, Irihapeti. M. Cultural Safety and Nursing Education in Aotearoa and Te Waipounamu: A thesis submitted to the Victoria University of Wellington in fulfilment of the requirements for the degree of Doctor of Philosophy in Nursing. Accessed 29/04/05. <<http://culturalsafety.massey.ac.nz/ChapterEight.htm>>. Wellington: Victoria University of Wellington, 2002.
- Ready T. Health Science Partnerships: Preparing the Workforce for the TwentyFirst Century. Yale-New Haven Teachers Institute. New Haven. On Common Ground Fall 1994;3. Accessed 01/09/04. <www.yale.edu/ynhti/pubs/A16/ready.html>.
- Ring IT, Firman D. Reducing indigenous mortality in Australia: lessons from other countries. *MJA* 1998;169: 528–533.
- Robbins F, Tamatea J. Training Needs Analysis for Maori Medical Students. Te Urunga o te Ra Dawn of the New Millennium Hauiti Marae, Tolaga Bay 7 to 9 April 2000. Accessed 04/08/04. <www.healthsite.co.nz/hauora_maori/te_ora/hui_00/abstracts.htm#Robbins>.
- Royal Australian College of General Practitioners website. Aboriginal Health. August 2000. Accessed 02/08/04. <www.racgp.org.au/folder.asp?id=705>.
- Rural Practice. Indigenous Students in Medicine 2002;6(4): 74–75.
- Schools Council. The Compulsory Years. Five to Fifteen: Reviewing the 'Compulsory' Years of Schooling. Canberra: National Board of Employment, Education and Training, AGPS, 1993.
- Steering committee for the Review of Government Service Provision (SCRGSP). Overcoming Indigenous Disadvantage Key Indicators 2003. Canberra: Productivity Commission, 2003.
- Standing Committee on Aboriginal and Torres Strait Islander Health. Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework. Canberra: AHMAC, 2002.
- Te Kupenga Hauora Maori and Pacific Health Website 2005. Maori and Pacific Admissions Scheme (MAPAS). Auckland: University of Auckland. Accessed 02/08/04. <www2.auckland.ac.nz/mpih/>.
- Trewin D, Madden R. The Health and Welfare of Australia's Aboriginal and Torres Strait Islander People, Canberra: AIHW, ABS, 2003.
- Turnbull D, Buckley P, Robinson J, Mather G, Leahy C, Marley J. Increasing the evidence base for selection for undergraduate medicine: four case studies investigating process and interim outcomes. *Medical Education* 2003;37: 1115–1120.
- University of Alberta. Aboriginal Health Care Careers Program. Accessed 02/08/04. <www.med.ualberta.ca/education/aboriginal.cfm>.
- University of Newcastle. University Leading the Way for Indigenous Health Workforce. Media Releases. Friday 29th August 2003. Accessed 26/08/04. <www.newcastle.edu.au/news/media-releases/2003/indighealth.html>.
- University of New South Wales. Indigenous Health Unit website. Accessed 26/08/04. <<http://notes.med.unsw.edu.au/rhu.nsf/website/home.Indigenous>>.
- University of North Dakota. Indians into Medicine. School of Medicine & Health Sciences. Accessed 02/08/04. <www.med.und.nodak.edu/depts/inmed/home.htm>.
- University of Queensland. Creating a Positive First Year Experience. Report of a Working

Party chaired by the Deputy Vice Chancellor (Academic). Queensland: UQ, December 2004.

University of Western Australia. High School Programs. The School of Indigenous Studies. Accessed 26/08/04. <<http://sis.uwa.edu.au/highschool/index.html>>.

Williams A, Cadet-James Y. The Role of Tertiary Education in Strengthening Indigenous Health. Cairns: Centre for Indigenous Health, Education & Research, July 2000.

Wood DF. Editorial: Medical School Selection – fair or unfair? Medical Education June 1999;33(6):399. Accessed 04/08/04. <<http://gateway.library.qut.edu.au/login?url=http://search.epnet.com.ezp02.library.qut.edu.au/login.aspx?direct=true&db=cmedm&an=10354312>>.



ENDNOTES

- 1 Steering committee for the Review of Government Service Provision (SCRGSP). *Overcoming Indigenous Disadvantage Key Indicators 2003*. Canberra: Productivity Commission, 2003.
- 2 Standing Committee on Aboriginal and Torres Strait Islander Health. *Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework*. Canberra: AHMAC, 2002.
- 3 D Trewin, R Madden. *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander People*. Canberra: Australian Institute of Health and Welfare, Australian Bureau of Statistics, 2003.
- 4 Ibid.
- 5 G Phillips. *Committee of Deans of Australian Medical Schools Indigenous Health Curriculum Framework*. Melbourne: VicHealth Koori Health Research and Community Development Unit, 2004.
- 6 Access Economics. *Indigenous Health Workforce Needs, Australia: AMA, July 2004*.
- 7 Australian Medical Association. *Healing Hands: Aboriginal and Torres Strait Islander Workforce Requirements*. Discussion paper, Canberra: Aboriginal and Torres Strait Islander Health, 2004.
- 8 Ibid.
- 9 New Zealand Health Workforce. *Framing Future Directions. Analysis of submissions and draft recommendations to the Minister of Health for Health Workforce Development, March 2003*.
T Ready. *Health Science Partnerships: Preparing the Workforce for the TwentyFirst Century*. Yale-New Haven Teachers Institute. New Haven. On Common Ground Fall 1994;3. Accessed 01/09/04. <www.yale.edu/ynhti/pubs/A16/ready.html>.
- 10 J Crump. Northern med school prioritizes aboriginal health. *Medical Post Toronto* Mar 16, 2004;40(11):63. Accessed 02/08/04. <http://gateway.proquest.com.gateway.library.qut.edu.au/openurl?url_ver=Z39.88-2004&res_dat=xri:pqd&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&rft_dat=xri:pqd:did=000000618720691&svc_dat=xri:pqil:fmt=text&req_dat=xri:pqil:pq_clntid=14394>.
- 10 Fred Hollows Foundation website. *Indigenous Health in Australia. The Health Emergency*. Accessed 15/09/04. <www.hollows.org>.
- 11 Op Cit, Phillips, 2004.
- 12 Op Cit, Australian Medical Association, 2004.
- 13 Op Cit, SCRGSP, 2003.
- 14 Op Cit, Fred Hollows Foundation, 2002.
- 15 Op Cit, Standing Committee on Aboriginal and Torres Strait Islander Health, 2002.
- 16 Op Cit, Australian Medical Association, 2004.
- 17 Op Cit, SCRGSP, 2003.
- 18 Op Cit, SCRGSP, 2003
- 19 Schools Council. *The Compulsory Years. Five to Fifteen: Reviewing the 'Compulsory' Years of Schooling*, Canberra: National Board of Employment, Education and Training, AGPS, 1993.

- 20 Op Cit, SCRGSP, 2003.
- 21 Op Cit. Schools Council, 1993.
- 22 Op Cit, SCRGSP, 2003.
- 23 Op Cit, SCRS GP, 2003.
- 24 Op Cit, Standing Committee on Aboriginal and Torres Strait Islander Health, 2002.
- 25 National Aboriginal and Torres Strait Islander Health Council. National Strategic Framework for Aboriginal and Torres Strait Islander Health, Framework for Action by Governments. Canberra: NATSIHC, July 2003.
- 26 Ibid.
- 27 Ibid.
- 28 Op Cit, Standing Committee on Aboriginal and Torres Strait Islander Health, 2002.
- 29 G Garvey, N Brown. Project of National Significance Final Report: Aboriginal Health A Priority for Australian Medical Schools, Newcastle: The Discipline of Aboriginal Health Studies Faculty of Health, University of Newcastle, 1999a.
- 30 G Garvey, E Rolfe, S Pearson. Agents for Social Change: the University of Newcastle's Role in Graduating Australian Aboriginal Doctors. Newcastle: Faculty of Medicine and Health Sciences, University of Newcastle, 2000.
- 31 G Garvey, D Atkinson. What Can Medical Schools Contribute to Improving Aboriginal Health? New DOCTOR Summer 1998/9;70. Doctors Reform Society of Australia. Accessed 04/08/04. <www.drs.org.au/journal/70/70medic.htm>.
- 32 Op Cit, Garvey, Rolfe, Pearson, 2000.
- 33 Rural Practice. Indigenous Students in Medicine 2002;6(4):74–75.
- 34 Australian Medical Workforce Advisory Committee. Characteristics of students entering Australian Medical Schools 1989 to 1997. AMWAC Report 1997.7 AIHW cat. HWL 6 December 1997. Canberra: AIHW, 1997.
- 35 Ibid.
- 36 A Williams, Y Cadet-James. The Role of Tertiary Education in Strengthening Indigenous Health. Cairns: Centre for Indigenous Health, Education & Research, July 2000.
- 37 Ibid.
- 38 K Adams. No Shame Job; A Health Career Information Guide for Indigenous Students. Canberra: Commonwealth of Australia, 1999.
- 39 Ibid.
- 40 Commonwealth Department of Education, Science and Training, National Report to Parliament on Indigenous Education and Training. Canberra: DEST, 2003.
- 41 Ibid.
- 42 R Jefferies. Maori Participation in Tertiary Education: Barriers and Strategies to Overcome Them. Wellington: Te Puni Kōkiri, the Ministry of Maori Development, 1999.
- 43 Robbins F, Tamatea J. Training Needs Analysis for Maori Medical Students. Te Urunga o te Ra Dawn of the New Millennium Haurua Marae, Tolaga Bay 7 to 9 April 2000. Accessed 04/08/04. <www.healthsite.co.nz/hauora_maori/te_ora/hui_00/abstracts.htm#Robbins>.
- 44 Te Kupenga Hauora Maori and Pacific Health Website 2005. Maori and Pacific Admissions Scheme (MAPAS). Auckland: University of Auckland. Accessed 02/08/04. <www2.auckland.ac.nz/mpih/>.

- 45 Op Cit, Ready, 1994.
- 46 University of North Dakota. Indians into Medicine. School of Medicine & Health Sciences. Accessed 02/08/04. <www.med.und.nodak.edu/depts/inmed/home.htm>.
- 47 American Medical Association. Accessed 16/09/04. <www.ama-assn.org/>.
- 48 Indian Health Service website. Jobs & Scholarships. Accessed 16/09/04. <www.ihs.gov/JobCareerDevelop/DHPS/Scholarships/Section_104.asp>.
- 49 University of Alberta. Aboriginal Health Care Careers Program. Accessed 02/08/04. <www.med.ualberta.ca/education/aboriginal.cfm>.
- 50 Op Cit, Crump, March 2004.
- 51 L Haley. 5% of enrolment spots should be filled by Natives: UBC dean. Medical Post Toronto: Aug 21, 2001;37(28):2. Accessed 02/08/04. <<http://proquest.umi.com.ezp01.library.qut.edu.au/pqdweb?did=358597911&sid=2&Fmt=3&clientId=14394&RQT=309&VName=PQD>>.
- 52 Ibid.
- 53 Op Cit, Crump, March 2004.
- 54 Health Workforce Advisory Committee, Fit for purpose and for practice: a review of the medical workforce in New Zealand. Consultation Document. New Zealand: HWAC, May 2005.
- 55 Kiwi Careers website. Doctors. Industry Overview. Accessed 02/08/04. <www.kiwicareers.govt.nz/industry/i3_heal/i3c_doc.htm>.
- 56 Op Cit, Jefferies, 1999.
- 57 Op Cit, New Zealand Health Workforce, 2003
- 58 University of Auckland. Vision 20/20. Accessed December 2004. <www.auckland.ac.nz/uoa/about/news/articles/2000/04/0003.cfm>. University of Auckland News 19 April, 2000.
- 59 Op Cit, Te Kupenga Hauora Maori and Pacific Health website, 2005.
- 60 University of Auckland website. Accessed 04/08/04. <www.Auckland.ac.nz>.
- 61 Ibid.
- 62 Centre of American Indian and Minority Health website. Accessed December 2004. <www1.umn.edu/umnnews/Feature_Stories/Good_medicine.html>.
- 63 C Terrell, B Beaudreau. 3000 by 2000 and Beyond: Next Steps for Promotion Diversity in the Health Professions. J. of Dental Education 2003;67(9).
- 64 Op Cit, Ready, 2004.
- 65 Op Cit, Ready, 2004.
- 66 D Adams. Doctors hope to inspire by school visits. American Medical News Apr 15, 2002;45(15):11–12. Accessed 04/08/04. <http://gateway.proquest.com.gateway.library.qut.edu.au/openurl?url_ver=Z39.88-2004&res_dat=xri:pqd&rft_val_fmt=info:ofi/mt:kev:mtx:journal&genre=article&rft_dat=xri:pqd:did=000000113705755&svc_dat=xri:pqil:fmt=html&req_dat=xri:pqil:pq_clntid=14394>.
- 67 Op Cit, University of North Dakota, 2004.
- 68 Op Cit, University of North Dakota, 2004.
- 69 Indian Health Service website. Jobs & Scholarships. Accessed 02/08/04. <www.ihs.gov/JobCareerDevelop/DHPS/Scholarships/Section_104.asp>.
- 70 M King. Commentary on training Aboriginal health professionals in Canada. Accessed December 2004. <www.acadre.ualberta.ca/Publications/newsletters/MKing%20commentary.pdf>. Edmonton: University of Alberta, 2004.
- 71 Op Cit, University of Alberta, 2005.

- 72 Op Cit, King, 2004.
- 73 Op Cit, University of Alberta, 2005
- 74 Op Cit, University of Alberta, 2005
- 75 Op Cit, Crump, 2004.
- 76 Op Cit, Crump, 2004.
- 77 Op Cit, Crump, 2004.
- 78 Op Cit, Crump, 2004.
- 79 Op Cit, Haley, 2001.
- 80 Op Cit, Haley, 2001.
- 81 Op Cit, Haley, 2001.
- 82 Op Cit, Trewin, Madden, 2003.
- 83 Op Cit, Trewin, Madden, 2003,
- 84 Op Cit, CDAMS website, www.cdams.org.au
- 85 Op Cit, Access Economics, 2004.
- 86 Op Cit, Australian Medical Association, 2004.
- 87 Op Cit, CDAMS website.
- 88 Op Cit, Trewin, Madden, 2003.
- 89 Op Cit, Phillips, 2004.
- 90 Irihapeti M Ramsden. Cultural Safety and Nursing Education in Aotearoa and Te Waipounamu: A thesis submitted to the Victoria University of Wellington in fulfilment of the requirements for the degree of Doctor of Philosophy in Nursing. Accessed 29/04/05. <<http://culturalsafety.massey.ac.nz/ChapterEight.htm>>. Wellington: Victoria University of Wellington, 2002.
- 91 JA Clarke, DD Bull, JR Clarke. USQ's Tertiary Preparation Program (TPP): More Than 15 Years of Evolution in Distance Preparatory/Bridging Programs. The Factors Influencing Preparatory Program Development at USQ: 1985-2004. Toowoomba: University of Southern Queensland.
- 92 E Bourke, R Farrow, K McConnochie, A Tucker. Career Development in Aboriginal Higher Education. South Australia: University of South Australia. Department of Employment, Education and Training. Evaluations and Investigations Program. Canberra: Australian Government Publishing Service, 1991.
- 93 Australian Medical Association. Public Report Card. Aboriginal and Torres Strait Islander Health. Time For Action. Canberra: AMA, 2003.
- 94 Op Cit, AMA, 2004.
- 95 Australian Council for Educational Research. GAMSAT: Information Booklet 2005. Camberwell, Victoria: ACER, 2004b.
- 96 Australian Council for Educational Research website. Accessed December 2004. <www.acer.edu.au>.
- 97 Australian Institute of Health and Welfare website. Accessed December 2004. <www.aihw.gov.au>.
- 98 J McCorquodale. The Legal Classification of Race in Australia. *Aboriginal History* 1986;10(1): 7–24.
- 99 Department of Health and Ageing. Medical Rural bonded Scholarships. Accessed December 2004. <www.health.gov.au/internet/wcms/Publishing.nsf/Content/health-workforce-scholar-index.htm>.
- 100 Op Cit, Australian Medical Association, 2004.
- 101 Op Cit, Australian Medical Association, 2004.
- 102 Op Cit, Ready, 2004.
- 103 Op Cit, King, 2004.
- 104 Op Cit, King, 2004; Op Cit, Ready, 2004; Op Cit, New Zealand Health Workforce, 2003.

- 105 Op Cit, Standing Committee on Aboriginal and Torres Strait Islander Health, 2002.
- 106 Op Cit, Standing Committee on Aboriginal and Torres Strait Islander Health, 2002.
- 107 Op Cit, Standing Committee on Aboriginal and Torres Strait Islander Health, 2002.
- 108 Op Cit, Australian Medical Association, 2004.
- 109 Op Cit, Williams, Cadet-James, 2000.
- 110 Op Cit, Te Kupenga Hauora Maori and Pacific Health website, 2005.
- 111 Op Cit, Jefferies, 1999.
- 112 Committee of Deans of Medical Schools. LIME Outcomes. Accessed December 2004. <www.cdams.org.au>.
- 113 Op Cit, Haley, 2001.
- 114 Op Cit, Haley, 2001.
- 115 Op Cit, Haley, 2001.
- 116 Op Cit, Adams, 2002.
- 117 Op Cit, Australian Medical Workforce Advisory Committee, 1997.
- 118 Op Cit, Committee of Deans of Medical Schools, 2005.
- 119 Op Cit, Crump, 2004.
- 120 Op Cit, University of Auckland website. Accessed December 2004. <www.auckland.ac.nz>.
- 121 Op Cit, Committee of Deans of Medical Schools, 2005.
- 122 Sydney University website. Accessed December 2004. <www.usyd.edu.au>.
- 123 Op Cit, SCRGSP, 2003.
- 124 Op Cit, Crump, 2004.
- 125 Op Cit, Te Kupenga Hauora Maori and Pacific Health website, 2005.
- 126 Op Cit, Williams, Cadet-James, 2000.
- 127 Mentoring Australia website. Official website of the National Mentoring Association of Australia Inc. Accessed December 2004. <www.dss.org.au>.
- 128 Op Cit, SCRGSP, 2003.
- 129 Op Cit, Australian Medical Association, 2004.
- 130 Medical school websites (e.g. Bond University <www.bond.edu.au/news/2005/jun-medstudents.htm>).
- 131 University of Queensland. Creating a Positive First Year Experience, Report of a Working Party chaired by the Deputy Vice-Chancellor, (Academic). Queensland: UQ December 2004.
- 132 Op Cit, Rural Practice, 2002.
- 133 Op Cit, University of Auckland website, <www.auckland.ac.nz>.
- 134 Op Cit, Phillips, 2004.
- 135 Op Cit, Australian Medical Association, 2004.

