

What supports Indigenous students to graduate in health science?

A systematic review

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Background

- Previous systematic review:

Factors affecting the retention of Indigenous Australians in the health workforce.

<https://doi.org/10.3390/ijerph15050914>

- Found minimal evidence of dedicated systematic efforts to apply effective retention strategies in the workforce.
- This review aimed to examine the strategies implemented by nursing, health and medical science faculties to improve retention and consider how they might apply in the work place.

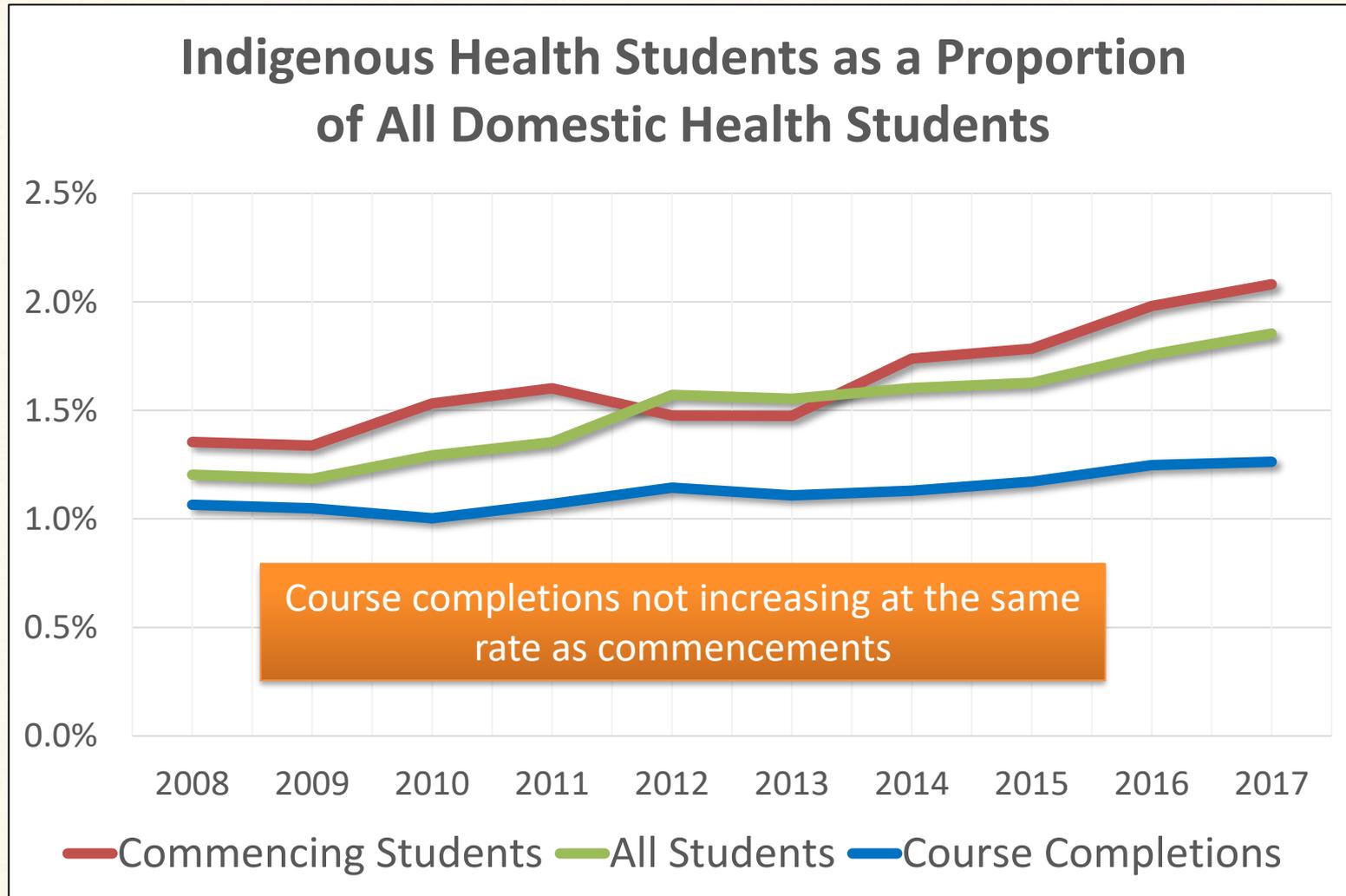


Health Workforce Shortage

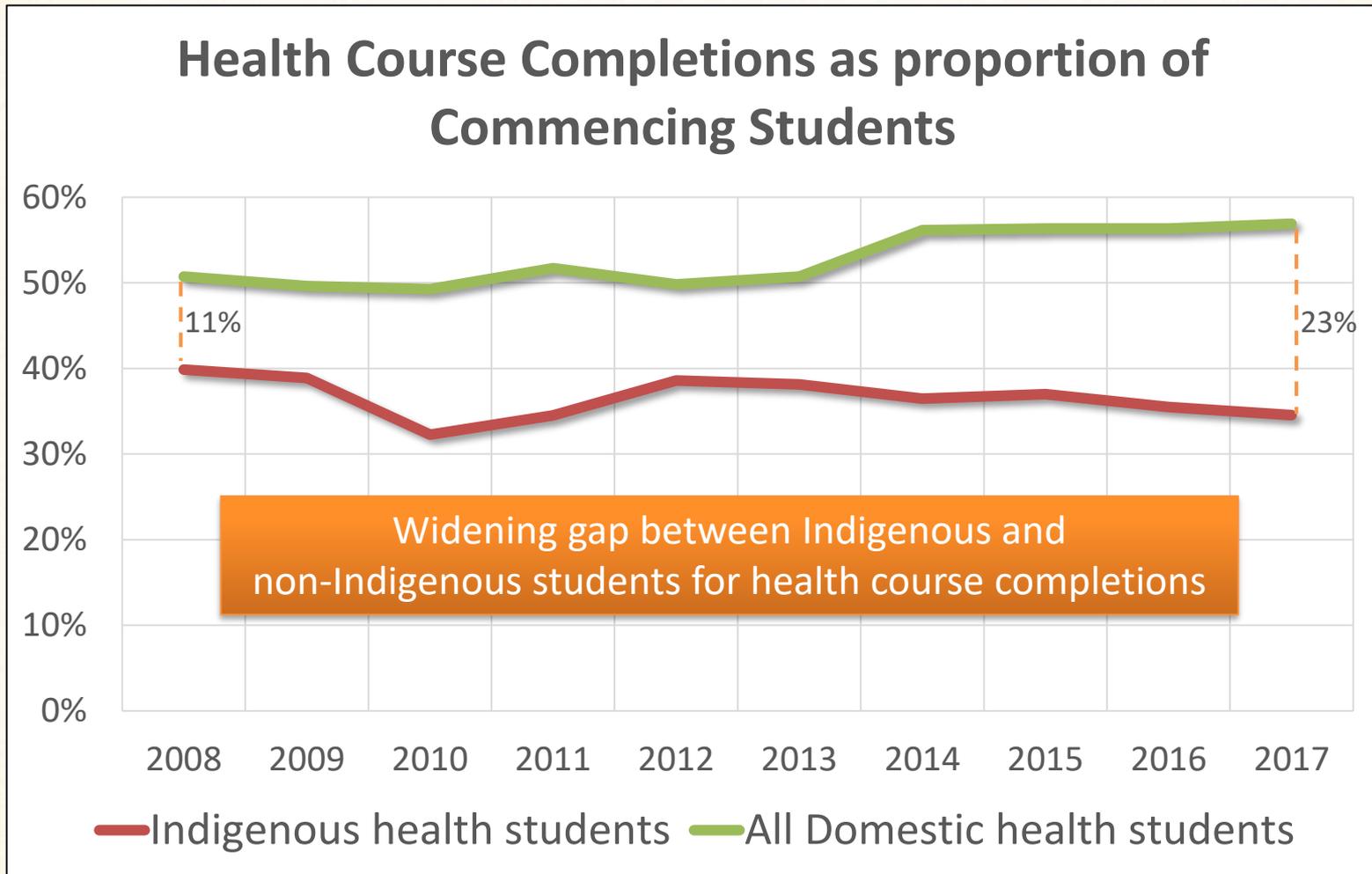
- Australia urgently needs more Aboriginal and Torres Strait Islander people within the health workforce.
- With increasing remoteness, the proportion of Indigenous people increases, as do the challenges in ensuring a sustainable health workforce appropriate for the local population.
- 2015: 1% of the registered health workforce were Indigenous (despite accounting for 3.3% of the Australian population and 4% of all hospitalisations)
- Large disparities for every health profession:
 - Indigenous nurses and midwives: 1.1% (3,752 of 360,008)
 - Indigenous medical practitioners: 0.5% (433 of 97,466)
 - Indigenous psychologists: 0.5% (103 of 25,650)



Health Student Shortage



Health Student Shortage



Literature Review Aim

- Identify literature on the enablers and barriers to the retention of Indigenous people within tertiary health courses.
- Highlight documented or proposed strategies that help support Indigenous health students to remain with their studies and successfully complete their degree.

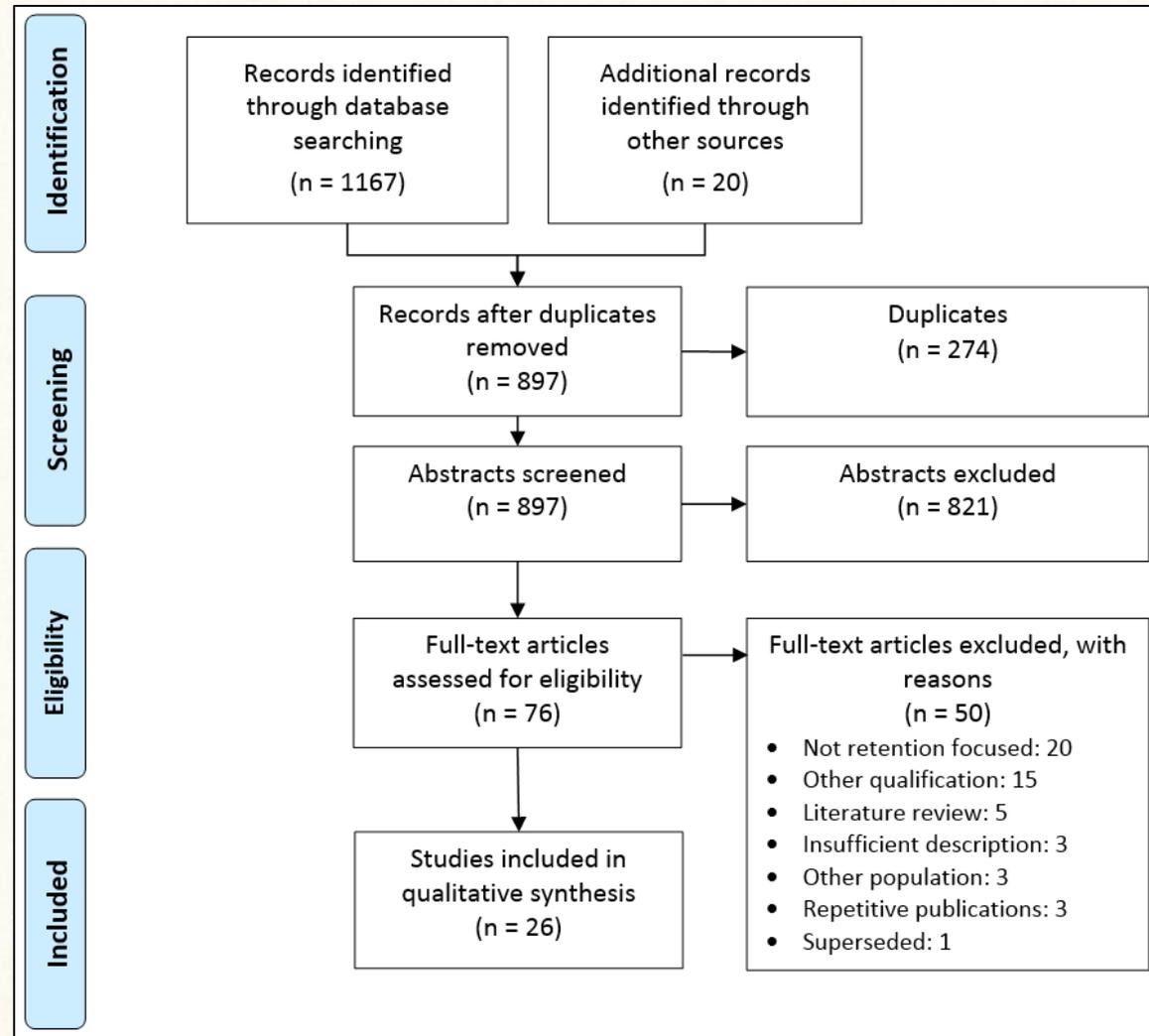


Methods

- Databases:
 - PubMed, CINAHL, PsycInfo, Embase, Global Health, Informit: Indigenous Collection, Informit: Health Collection, ERIC, Google Scholar
- Hand searched journal:
 - The Australian Journal of Indigenous Education
- Citation snowballing
- Inclusion criteria:
 - Relevant to retention, attrition or course completion for Indigenous Australians
 - Studying a bachelor's degree or higher in health at university



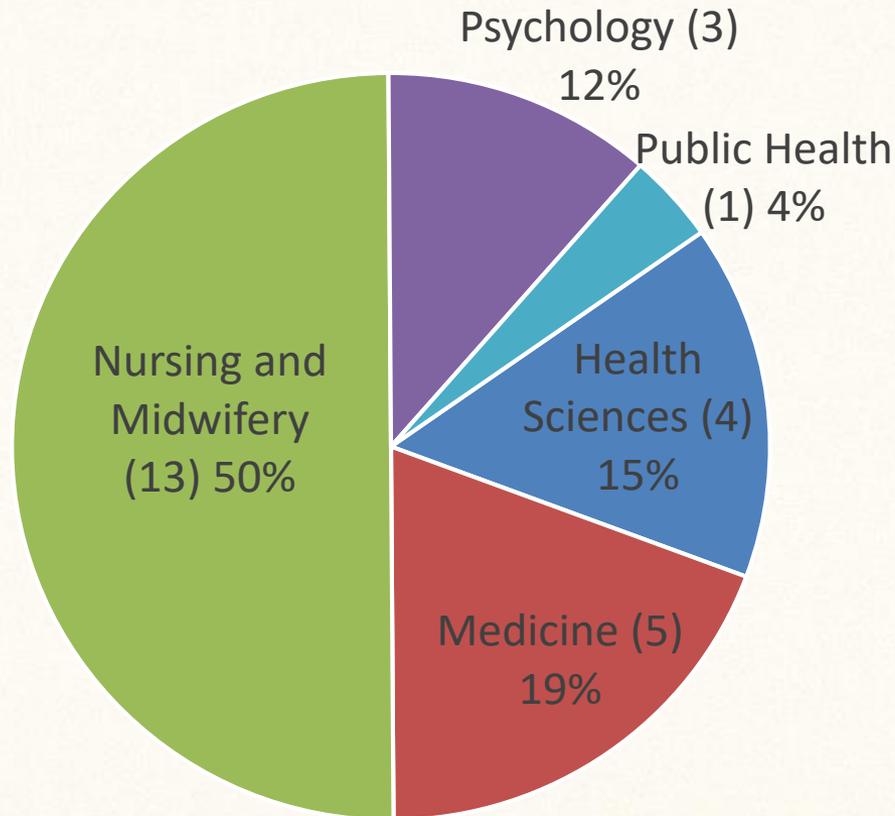
Search results and screening process



Results

Description of articles (n=26)

Course studied



*Health Sciences: Studies with students across multiple health courses.

Courses included: dentistry, health science, human movement, medicine, nursing and midwifery, occupational therapy, physiotherapy and podiatry.



Factors affecting retention

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Student</p>	<p style="text-align: center;">Retention</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 10px;"> <p style="text-align: center;">Resilience</p> <ul style="list-style-type: none"> • Support networks <ul style="list-style-type: none"> ○ Family support (10) ○ Peer support (7) ○ Other (5) • Role models (4) • Motivations <ul style="list-style-type: none"> ○ Making a difference for Indigenous health (6) ○ Being a role model (3) ○ Improving career options (3) • Personal attributes <ul style="list-style-type: none"> ○ Confidence, resilience and perseverance (5) ○ Life experience and skills (4) ○ Seeking support (2) </td> <td style="width: 50%; padding: 10px;"> <p style="text-align: center;">Support</p> <ul style="list-style-type: none"> • Cultural support <ul style="list-style-type: none"> ○ Support from non-Indigenous staff (5) ○ Indigenous content (4) ○ Indigenous academics (3) ○ Organisational leadership (2) • Academic support <ul style="list-style-type: none"> ○ Flexibility in delivery (3) ○ Tutoring (3) ○ Mentoring (2) • Indigenous Student Support Centre (9) • Financial assistance (6) • Recruitment and preparation <ul style="list-style-type: none"> ○ Recognition of prior skills (2) ○ Orientation (2) </td> </tr> </table>	<p style="text-align: center;">Resilience</p> <ul style="list-style-type: none"> • Support networks <ul style="list-style-type: none"> ○ Family support (10) ○ Peer support (7) ○ Other (5) • Role models (4) • Motivations <ul style="list-style-type: none"> ○ Making a difference for Indigenous health (6) ○ Being a role model (3) ○ Improving career options (3) • Personal attributes <ul style="list-style-type: none"> ○ Confidence, resilience and perseverance (5) ○ Life experience and skills (4) ○ Seeking support (2) 	<p style="text-align: center;">Support</p> <ul style="list-style-type: none"> • Cultural support <ul style="list-style-type: none"> ○ Support from non-Indigenous staff (5) ○ Indigenous content (4) ○ Indigenous academics (3) ○ Organisational leadership (2) • Academic support <ul style="list-style-type: none"> ○ Flexibility in delivery (3) ○ Tutoring (3) ○ Mentoring (2) • Indigenous Student Support Centre (9) • Financial assistance (6) • Recruitment and preparation <ul style="list-style-type: none"> ○ Recognition of prior skills (2) ○ Orientation (2)
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Factors affecting retention

- Usually a combination of factors across several quadrants that resulted in students remaining or departing.

“The reasons for [withdrawing] were often quite mixed, with one problem adding to another, creating an unbearable burden for some individuals.”

(Young et al. 2007)

Strategies for growing strong students

3

Time at University

- Cultural support
 - Whole-of-school approach (7)
 - Indigenous academics (6)
 - Cultural training (4)
 - Indigenous content (4)
 - Community involvement (4)
 - Address racism (2)
- Academic support
 - Mentoring (8)
 - Tutoring (8)
 - Flexible delivery (7)
 - Clinical placement support (4)
- Indigenous Student Support Centre (7)
- Social and economic support
 - Financial support (5)
 - Foster peer networks (4)
 - Personal contact (3)

4

Point of Departure

- Leave door open (3)
- Graduation – celebrate success (1)

2

Preparation

- Pre-entry preparation (6)
- Comprehensive orientation (3)

1

Recruitment

- Selection (4)
- Multiple entry pathways (4)
- Recruiting a cohort (3)
- Quotas (2)

Note: Numbers in round brackets refer to the number of articles identifying the strategy.

Strategies for improving retention

- In the literature recruitment and retention are usually addressed as separate issues.
- We found that recruitment and retention are linked.
- The process of selection and preparation for university is critical to retention.
- We used the image of a tree to represent the retention strategies implemented within universities. Strategies are grouped chronologically based on where they supported a student during their study timeline.
- Recruitment and Preparation strategies are positioned in the roots of the tree to represent how they help to support the student during their time at university.

Strategies for improving retention

“A multi-layered approach to student recruitment and graduation is required as single strategies will have little or no impact.”

(Holliday et al. 2015)

Examples of successful strategies

- Indigenous Nursing Support Model: Helping Hands
 - University of Southern Queensland
 - Department of Nursing and Midwifery
 - 5 step-process that supports students throughout their education from recruitment until graduation
 - Best, O., & Stuart, L. (2014). An Aboriginal nurse-led working model for success in graduating Indigenous Australian nurses. *Contemp Nurse*, 48(1), 59-66. doi: 10.5172/conu.2014.48.1.59
- Miroma Bunbilla: 5 day pre-entry to medicine intensive course
 - University of Newcastle and University of New England
 - School of Medicine and Public Health
 - Designed to better prepare Indigenous students, strengthen selection process, and improve retention especially during first year
 - Holliday, V., O'Mara, P., & Watts, A. (2015). The Miroma Bunbilla Pre-entry to Medicine program for Aboriginal and Torres Strait Islander people *LIME Good Practice Case Studies Volume 3* (pp. 24-30).



Implications for the workplace

- Evidence suggests that retention after graduation in clinical roles is also improved through a multi-layered approach including:
 - Appropriate recruitment and orientation
 - Whole-of-service approach
 - Clinical support and mentoring
 - Flexibility
 - Fostering staff networks and peer support
 - Considering point of departure

Strategies for growing strong workers

3

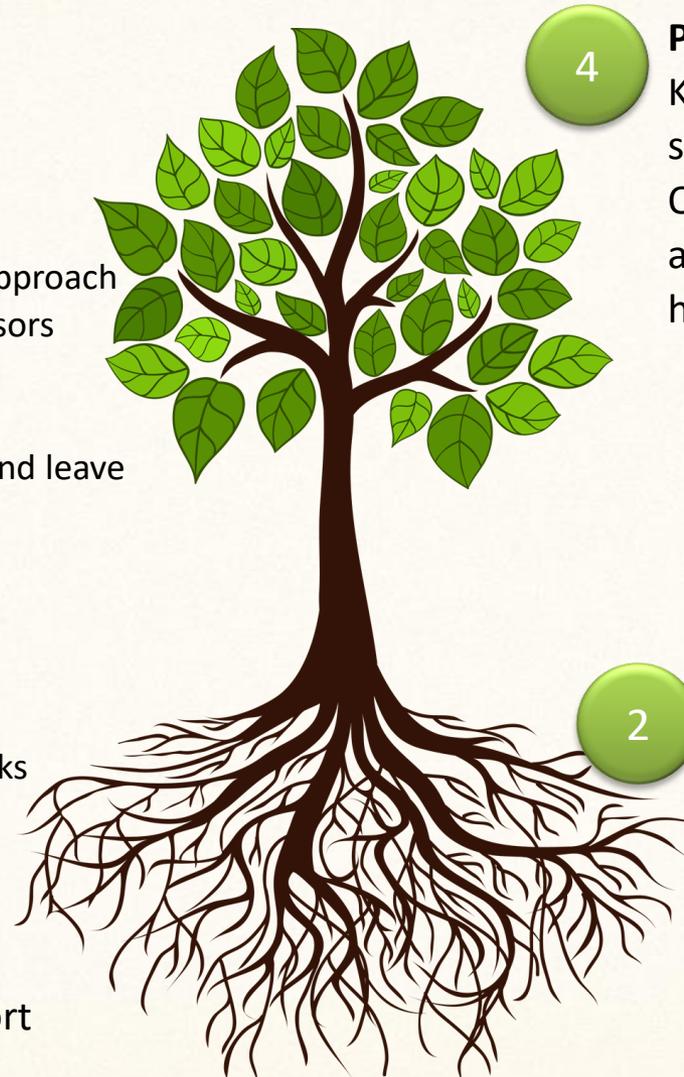
Time at health service

- Cultural support
 - Whole-of-service approach
 - Indigenous supervisors
 - Cultural training
 - Address racism
 - Flexibility in work and leave arrangements
- Clinical support
 - Mentoring
 - Clinical supervision
- Social support
 - Foster peer networks
 - Personal contact

1

Recruitment

Selection
Recruiting a cohort



4

Point of Departure

Keep in contact with former staff who may wish return
Offer flexible leave arrangements so staff don't have to leave

2

Preparation

Pre-entry preparation
Comprehensive orientation

Conclusions

- Universities have an important role to play in addressing rural health workforce challenges, including low numbers of Indigenous people in the health workforce.
- Retention is improved through a multi-layered approach that starts before the student commences at university.
- Strategies include:
 - Appropriate preparation and orientation to university
 - Building a supportive and enabling school culture
 - Employing Indigenous academics
 - Mentoring and supporting Indigenous students throughout their studies
 - Flexible delivery of content, including remote and online delivery
 - Providing social and financial support
 - ‘Leaving the university door open’ for students to return



Conclusions

- Rural and remote areas seeking to support local Indigenous people to enter the health workforce may be able to assist around the financial challenges and personal/family issues that can occur.
- There is a need for research into:
 - Factors influencing retention of Indigenous allied health students
 - Indigenous students' experiences while on clinical placement and strategies to support students on placement
 - Existing and future programs and strategies to be evaluated with pre- and post-implementation measures



More information

Taylor, E.V., Lalovic, A. & Thompson, S.C. Beyond enrolments: a systematic review exploring the factors affecting the retention of Aboriginal and Torres Strait Islander health students in the tertiary education system. *Int J Equity Health* 18, 136 (2019). <https://doi.org/10.1186/s12939-019-1038-7>

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Included studies

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