A cost-effective approach to closing the gap in health, education and employment: Investing in Aboriginal and Torres Strait Islander nursing education, training and employment

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Executive summary

Main findings

- Substantial national nursing workforce shortfalls of 28,000 nurses in the next three years are predicted, rising to over 100,000 nurses by the year 2030.

- To achieve a population parity and Commonwealth Public Service employment target of 3% by 2018, an estimated 6,516 additional Aboriginal and Torres Strait Islander nurses and midwives would be required. If phased in by a 1% annual increase this would mean an additional 2,172 Aboriginal and Torres Strait Islander nurses annually.

- A national Aboriginal and Torres Strait Islander nursing workforce strategy is needed to address barriers to recruitment and retention, including wage disparities, cultural and financial barriers. Aboriginal and Torres Strait Islander health professional workforce policy and funding should be aligned. Establishing transparent national targets and key performance indicators would enable monitoring and improve performance.

- A larger Aboriginal and Torres Strait Islander health professional workforce is essential to improving health outcomes for Aboriginal and Torres Strait Islander Australians, who represent 3% of the total population, yet Aboriginal and Torres Strait Islander nurses and midwives account for less than 1% of total nursing employment and 0.3% of Aboriginal and Torres Strait Islander Australians. The current workforce is poorly distributed across States and Territories.

- Aboriginal and Torres Strait Islander people are more likely than non-Indigenous people to access nursing services. The neglect of Aboriginal and Torres Strait Islander nursing and midwifery workforce needs in health policy is concerning in view of demonstrated links between limited Aboriginal and Torres Strait Islander health workforce capacity, barriers to accessing primary health care services, and large and unacceptable gaps in health outcomes.

- Increasing Aboriginal and Torres Strait Islander nursing and midwifery employment is imperative on both economic and population health grounds. The recently stated Commonwealth Public Service Aboriginal and Torres Strait Islander employment target of 3% by 2018 is an important and appropriate initiative. It is unattainable however, given current Aboriginal and Torres Strait Islander health policy and funding parameters. These are unlikely to redress multiple barriers to nursing careers.

- The pool of tertiary trained Aboriginal and Torres Strait Islander people remains small. Aboriginal and Torres Strait Islander nursing completion rates are relatively low and declining. Demand for Aboriginal and Torres Strait Islander nurses and other health professionals, particularly in Aboriginal community-controlled primary health care services, exceeds supply.

- Macro-level reforms are needed to link Aboriginal and Torres Strait Islander health, education and employment policies and practices. The current system is not cost-effective and does not
produce first-class results. Highly disadvantaged ‘minority’ students, and Aboriginal and Torres Strait Islander students the most of all, are unlikely to succeed in the absence of long-term specialised support.

“Creating walking tracks to success” requires better school outcomes and pathways for Aboriginal and Torres Strait Islander students through VET (vocational education and training) to higher education and nursing employment. It requires nationally consistent recruitment and retention training and employment programs, and the implementation of culturally appropriate standards in nursing training, accreditation and employment.

Macroeconomic growth does not necessarily ‘trickle down’ to disadvantaged communities. Targeted impact investment is a cost-effective approach to achieve population parity targets in Aboriginal and Torres Strait Islander nursing and midwifery training and employment, as well as ‘Closing the Gap’ targets in health, employment and education.

The multiplier effects of building Aboriginal and Torres Strait Islander nursing workforce capacity are substantial, particularly if investment takes place within a policy implementation framework such as the National Aboriginal and Torres Strait Islander Health Plan.

**Recommendations**

Several recommendations below are consistent with those made in the 7th annual ‘Close the Gap Report’ (CtGSC 2015), the Australian Health Ministers’ Advisory Council ‘Aboriginal and Torres Strait Islander Health Performance Framework Report’ (AHMAC 2012), the ‘Review of Australian Government Health Workforce Programs’ (Mason 2013), ‘Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People’ (Behrendt et al, 2012) and the ‘gettin em n keepin em Report’ (Aboriginal and Torres Strait Islander Nursing Education Working Group, 2002).

1. **NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER NURSING WORKFORCE STRATEGY: CONTEXT**

Government and CATSINaM to design and coordinate a National Aboriginal and Torres Strait Islander Nursing Workforce Strategy and associated Implementation Plan to address workforce shortfalls, training and employment issues in the context of:

a) Development of an Implementation Plan for an updated National Aboriginal and Torres Strait Islander Health Plan (NATSIHP) 2013-2023.

b) Incorporation of a comprehensive whole-of-life core services model in the NATSIHP (CtGSC 2015 recommendation 9) that includes Aboriginal and Torres Strait Islander health training and workforce needs.

d) Revisions to the Commonwealth Indigenous Advancement Strategy (IAS) to strengthen connections between the IAS and Close the Gap policies and programs.

2. NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER NURSING WORKFORCE STRATEGY: CONTENT

The Strategy should include:

a) A minimum national population parity target, i.e. government commitment to a 3% Aboriginal and Torres Strait Islander nursing and midwifery employment by 2018.

b) Policy and funding alignment - see Recommendation 6b.

c) Rural and remote training and workforce for special and/or additional needs.

d) Pathways from school, VET, higher education to employment.

e) Nursing re-entry training, financial and resource support.

f) Cultural competency, inclusion and cultural safety as a requirement in workplaces and training – see Recommendation 5b.

g) Accountability and reporting – see Recommendation 5.

3. NURSING EDUCATION

As part of the National Aboriginal and Torres Strait Islander Nursing Workforce Strategy and associated Implementation Plan, specific strategies are required to boost the recruitment and retention of nursing students, including:

- health career advice and vocational support in schools
- bridging programs between school and university
- academic support units, i.e. a minimum number in universities in each jurisdiction
- Aboriginal and Torres Strait Islander nursing position in Schools of Nursing for academic and referral services that are linked with tertiary Aboriginal and Torres Strait Islander education units
- a national unified approach to incorporating Aboriginal and Torres Strait Islander health competencies in curriculum, which are reported as KPIs in the National Aboriginal and Torres Strait Islander Nursing Workforce Strategy and associated Implementation Plan - see Recommendations 1 and 2.
- financial and support requirements for students for the duration of their VET/higher education studies.
4. **STANDARDS AND ACCREDITATION**

   a) The implementation of best-practice cultural standards in all nursing, midwifery and nurse practitioner teaching programs and accreditation standards.

   b) Affirmative action to support Aboriginal and Torres Strait Islander higher education and workforce recruitment and retention in all nursing, midwifery and nurse practitioner accreditation standards.

5. **ACCOUNTABILITY AND REPORTING: TARGETS AND KEY PERFORMANCE INDICATORS**

   a) Data review and report by the National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data (NAGATSIHID) on data quality and improvements regarding Aboriginal and Torres Strait Islander nursing and midwifery education, training and employment.

   b) SMART targets (NATSIHP 2013) and Key Performance Indicators for nursing-related VET, Registered Training Organisations, higher education enrolments and completions, employment, and cultural competency and safety, as part of National Aboriginal and Torres Strait Islander Nursing Workforce Strategy and associated Implementation Plan.

   c) Accountability, timeframes and reporting requirements as part of National Aboriginal and Torres Strait Islander Nursing Workforce Strategy and associated Implementation Plan – see Recommendation 2g.

6. **FUNDING**

   a) Short-term investment to achieve an additional 2,172 Aboriginal and Torres Strait Islander nurses and/or midwives combined with a review of outcomes within two years.

   b) Funding security through alignment between policy and funding, indexation for inflation, population need and service demand.

   c) Funding model review to maximise attainment of population parity targets, funding coordination, funding security, governance and accountability standards for Aboriginal and Torres Strait Islander nursing-related public finance recipients.

   d) Funding confirmed for CATSINaM’s program requirements over 2015-2018 - see Recommendation 8a.

   e) Procurement policy, i.e. a minimum of 3% of Commonwealth procurement contracts to be awarded to Aboriginal and Torres Strait Islander training and employment providers/suppliers by 2020.

   f) Preferred provider status to Registered Training Organisation members of the Aboriginal and Torres Strait Islander Health Registered Training Organisation National Network (ATSIHRTONN).
7. OTHER GOVERNMENT POLICY

a) Higher education reform policies that cushion Aboriginal and Torres Strait Islander nursing students against fees and HECS/HELP reforms.

b) Commonwealth scholarship and bursary expansions and offsets against higher education reform policies with adverse implications for potential Aboriginal and Torres Strait Islander students.

c) Commonwealth current recruitment and employment freeze has exemptions for Aboriginal and Torres Strait Islander nurses and midwives.

d) National Aboriginal and Torres Strait Islander nursing advisory position to be created.

8. CATSINaM

a) Funding confirmed for CATSINaM’s program requirements over 2015-2018 – see Recommendation 6d.

b) Leadership enhancement through dedicated government support for establishing a national ‘Leaders in Aboriginal and Torres Strait Islander Nursing and Midwifery Education Network’ (LINMEN).

c) Equal partnerships requirement through a transfer of resources to CATSINaM to enable equal and effective partnerships with governments and key stakeholders.
Summary

Section 1: Aboriginal and Torres Strait Islander nurses and midwives and CATSINaM

The health workforce is the largest component of the health budget in Australia and nurses are the largest health profession. Substantial nursing workforce shortages are predicted in this ageing workforce in the next 15 years. Aboriginal and Torres Strait Islander Australians are proportionately more likely than non-Indigenous Australians to access nursing services.

Although Aboriginal and Torres Strait Islander nurses and midwives are the largest occupational group in the Aboriginal and Torres Strait Islander health professional workforce, and nursing is the most common health-related training course for Aboriginal and Torres Strait Islander undergraduate students, Aboriginal and Torres Strait Islander nurses and midwives represent only 0.9% of total employment in these professions.

The population parity gap between Aboriginal and Torres Strait Islander nurses and midwives and their non-Indigenous counterparts is extreme. On a population basis, each Aboriginal and Torres Strait Islander nurse/midwife caters for 309 Aboriginal and Torres Strait Islander Australians, compared with 74 non-Indigenous Australians for each non-Indigenous nurse/midwife. Further, the Aboriginal and Torres Strait Islander workforce is poorly distributed across States and Territories.

This report finds that increasing Aboriginal and Torres Strait Islander nursing and midwifery employment is imperative on both economic and population health grounds.

The Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM) is the national health professional organisation for Aboriginal and Torres Strait Islander nurses and midwives. CATSINaM has developed a national recruitment and retention strategy based on targeted programs to redress current barriers to Aboriginal and Torres Strait Islander nursing training and employment.

Section 2: The context

2.1 THE PEOPLE

Aboriginal and Torres Strait Islander Australians represents 3% of Australia's population and have disproportionately greater health needs.

2.2 HEALTH SYSTEM PERFORMANCE

While a number of health workforce policies and programs focus on recruiting and retaining doctors, addressing nursing and midwifery workforce issues is relatively neglected, and in particular, the disproportionately small number of Aboriginal and Torres Strait Islander nurses and midwives.
The access of Aboriginal and Torres Strait Islander Australians to health services is considerably less than appropriate for the level of need (CtGSC 2015: 34). The current system performs poorly against indicators in the Aboriginal and Torres Strait Islander Health Performance Framework, including health status and outcomes, determinants of health (including education and employment), and health system performance measures (such as cultural competency, health workforce capacity and sustainability). Relatively low school completion rates, employability skills (literacy and numeracy) and vocational education and training (VET) outcomes limit higher education nursing graduation rates, and impede growth in the Aboriginal and Torres Strait Islander professional health workforce.

In December 2014, the Australian Government declared that it would aim to increase Aboriginal and Torres Strait Islander employment in the Commonwealth public sector to 3% by 2018. The Forrest Review ‘Creating Parity Report’ recommended 4% over four years. No additional expenditure has been allocated to achieve this aim.

Section 3: VET and higher education health and nursing

3.1 Health studies in the VET sector

Aboriginal and Torres Strait Islander Australians are over-represented in the VET system (5.4%) on a population basis (3.0%), but they are concentrated in low levels of training and have low completion rates. Multiple barriers to Aboriginal and Torres Strait Islander pathways and training pipelines into higher education include low levels of VET qualifications and lack of specific educational transition programs.

3.2 Higher education nursing commencement and completion rates

Despite increasing Aboriginal and Torres Strait Islander nursing enrolments in universities, a gap of more than 30% in completion rates has increased by 10% in the past three years. The size of the relative Aboriginal and Torres Strait Islander footprint in nursing is small, at 1.7% of all commencing students and only 1% of completing students. Creating parity between Aboriginal and Torres Strait Islander and non-Indigenous nursing completion rates would require (at least) an extra 95 Aboriginal and Torres Strait Islander graduates annually on average, as well as bridging and academic support services.

3.3 Creating parity in higher education

Aboriginal and Torres Strait Islander students in general lack adequate preparation for higher education, resulting in low completion rates. The number of Aboriginal and Torres Strait Islander nursing graduates is too low to contribute to ‘Closing the Health Gap’ targets or reducing nursing workforce shortfalls in the coming years. System-wide rather than individual barriers continue to impede progress in Aboriginal and Torres Strait Islander nursing training outcomes, including cultural exclusion and insufficient academic support. Attainment of the Commonwealth’s “aspirational” population parity targets for Aboriginal and Torres Strait Islander students and staff in higher education will require policy and funding adjustments.
Section 4: Nursing and midwifery workforce

4.1 Australian Nursing and Midwifery Workforce Needs and Projections

The capacity to recruit and retain appropriate staff is critical to the appropriateness, continuity and sustainability of health services, including Aboriginal and Torres Strait Islander primary health care services. National workforce shortages of 28,000 nurses in the next three years and more than 100,000 nurses by 2030 are predicted. General health workforce policy and planning is limited in assessing and predicting Aboriginal and Torres Strait Islander health workforce needs, owing to the relatively small scale of the Aboriginal and Torres Strait Islander population and health workforce, and its dispersed geographical distribution. The lead times required to redress shortages are long.

4.2 Trends in Aboriginal and Torres Strait Islander Health Professional Employment, 1996 to 2011

The Aboriginal and Torres Strait Islander footprint in Australia’s health professional workforce overall has increased by 1% over the past decade but remains relatively small. It accounts for 1.8% of all employment in the sector, well below population parity.

4.3 Current Aboriginal and Torres Strait Islander Footprint in the Nursing and Midwifery Profession

The largest occupational group in Aboriginal and Torres Strait Islander health professional employment is nurses and midwives, who represent over a half (52%) of all Aboriginal and Torres Strait Islander professional employment. The Aboriginal and Torres Strait Islander footprint in nursing is much smaller (0.9%) than in the overall Aboriginal and Torres Strait Islander health workforce (1.8%), although is larger than in the medical and many allied health professions.

4.4 Current Aboriginal and Torres Strait Islander Nursing and Midwifery Employment, Distribution by States and Territories

The distribution of Aboriginal and Torres Strait Islander nursing and midwifery employment is uneven across jurisdictions and on a population basis is the smallest in the Northern Territory, followed by Western Australia.

4.5 Aboriginal and Torres Strait Islander Nursing, Midwifery and Health Workforce Needs

The health workforce does not reflect Aboriginal and Torres Strait Islander health workforce current and future needs in its make-up and distribution. General health workforce analysis is limited in this respect. The extremely small size of the Aboriginal and Torres Strait Islander nursing and midwifery workforce on a population basis is concerning in view of demonstrated links between (limited) Aboriginal and Torres Strait Islander workforce capacity, barriers to
accessing health services, and primary health care services in particular, and continuing large and unacceptable gaps in health outcomes.

Aboriginal and Torres Strait Islander nursing graduation rates are inadequate to cater for increasing demand for nurses in the context of rapid increases in demand for Aboriginal and Torres Strait Islander primary care health services and health professional staff in particular. Health systems with a strong primary health care focus are more efficient, have fewer health inequities and provide better outcomes.

**4.6 Addressing shortages and achieving parity in Aboriginal and Torres Strait Islander nursing and midwifery employment**

To achieve population parity and a Commonwealth public service employment target of 3% by 2018, an estimated 6,516 additional Aboriginal and Torres Strait Islander nurses and midwives would be required. If phased in by a 1% annual increase, this would mean an additional 2,172 Aboriginal and Torres Strait Islander nurses annually.

**Section 5: Training, recruitment and retention issues**

**5.1 Macro reform: Linking health, education and employment**

Aboriginal and Torres Strait Islander health, education and employment are integrally connected. Building an Aboriginal and Torres Strait Islander health professional workforce is critical to achieving improved health, education and employment outcomes for Aboriginal and Torres Strait Islander Australians.

**5.2 Pathways**

Pathways from school through the vocational education and training (VET) system into higher education are limited and are far from the ideal of “Creating Walking Tracks to Success”. Pathway development can only succeed if there is a significant pool of ‘tertiary education ready’ students. Highly disadvantaged ‘minority’ students are unlikely to fare well in education and training in the absence of specialised support for the duration of their studies. Repeated recommendations to clear and enlarge pathways for Aboriginal and Torres Strait Islander young people have been ignored.

**5.3 Improving higher education nursing completion rates**

Achieving ‘Closing the Gap’ policy, equitable public health standards and greater economic efficiency in resource allocation all require urgent attention to the issue of Aboriginal and Torres Strait Islander student attrition in nursing. The current system needs reform. It is not cost-effective, does not produce first-class results and it embodies continuing systemic financial, academic, institutional and cultural barriers to recruiting and retaining Aboriginal and Torres Strait Islander nursing and other higher education students. Establishing national enrolment and completion targets and cultural competency standards is imperative but overlooked, owing
perhaps to the relatively small imprint of Aboriginal and Torres Strait Islander people in higher education and gender biases associated with nursing.

5.4 IMPLEMENTING ACCREDITATION STANDARDS

Accreditation standards are an important mechanism for assessing professional standards against specific competency standards, and now include Aboriginal and Torres Strait Islander history, culture and health issues in nursing curricula. Despite this, systemic cultural safety flaws persist in the health system.

5.5 WORKFORCE RECRUITMENT AND RETENTION

Increasing the size and capacity of the Aboriginal and Torres Strait Islander health workforce is central to overall health and wellbeing in the 2013-2023 National Aboriginal and Torres Strait Islander Health Plan. Workforce retention and recruitment issues include: limited professional development opportunities; financial, funding and other resource barriers; cultural discrimination in workplaces; and wage disparities for nursing and other professional staff between Aboriginal and Torres Strait Islander primary health care and mainstream health services.

5.6 DEVELOPING A MONITORING AND EVALUATION FRAMEWORK

General health workforce planning and projections do not identify relatively small Aboriginal and Torres Strait Islander population and health workforce needs.

5.7 GOVERNMENT POLICY

The Commonwealth ‘Indigenous Advancement Strategy’ (July 2014) is accompanied by forecasted reductions in government Aboriginal and Torres Strait Islander health, and higher education and vocational education and training expenditure (see also Appendix I and III). The potential negative impact of proposed budget measures on Aboriginal and Torres Strait Islander health programs is substantial. Government expenditure on Aboriginal and Torres Strait Islander health is not related to population size, distribution or health need.

Policy and funding requirements for addressing nursing shortfalls and achieving employment policy targets based on population parity should account for population growth, distribution, health need, professional workforce development and national Aboriginal and Torres Strait Islander health organisation representation. Aboriginal and Torres Strait Islander nursing and national organisation funding models should be reconsidered.

5.8 EMPOWERMENT EQUALS HEALTH

There has been minimal consultation or engagement with Aboriginal and Torres Strait Islander people and organisations in recent Aboriginal and Torres Strait Islander policy developments. It would be timely and appropriate for government to recognise the representative voice of Aboriginal and Torres Strait Islander nurses and midwives - CATSINaM, and provide it with adequate financial support to achieve its recruitment, retention and nursing support programs.
Section 6 Economic benefits

6.1 Directing government expenditure to higher level VET training

6.2 Redirecting government expenditure from ‘reactive’ services to tertiary education

6.3 Low nursing completion rates drain the public purse

Investing in Aboriginal and Torres Strait Islander Training Packages for intermediate labour market programs such as bridging and enabling courses, in higher level VET nursing entry level courses and in Aboriginal and Torres Strait Islander national health organisations to drive progress, is recommended as part of a government coordinated approach to Aboriginal and Torres Strait Islander health training. Relatively modest government expenditure on redressing institutional and cultural barriers to higher education completion rates would generate high individual and community economic and population health gains, as well as government savings and additional government revenue.

6.4 Success breeds success - role model effects

Increasing professional employment and economic independence enlarges the pool of role models for young Aboriginal and Torres Strait Islander people.

6.5 Building Aboriginal and Torres Strait Islander nursing health workforce capacity: a cost-effective approach to ‘Closing the Gap’

This channel for employment and economic growth in communities is a cost-effective approach to ‘Closing the Gap’ by compounding economic multiplier benefits. Investing $205 per Aboriginal and Torres Strait Islander Australian on an additional 2,172 Aboriginal and Torres Strait Islander nurses and midwives represents, on an annual per capita basis, 0.5% of total government expenditure on Aboriginal and Torres Strait Islander people, 2.3% of Aboriginal and Torres Strait Islander health expenditure and 3.2% of Aboriginal and Torres Strait Islander social security expenditure.

6.6 Multiplier effects of a targeted impact investment: closing parity gaps in employment, health and education

Macroeconomic growth does not necessarily ‘trickle down’ to disadvantaged communities. Intervention in the form of targeted impact investment is needed to achieve a 3% Aboriginal and Torres Strait Islander employment target in nursing and midwifery employment. Multiplier analysis provides a guide to achieving this by assessing the impact of additional employment of Aboriginal and Torres Strait Islander nurses and midwives. Multiplier effects would spread through communities and across sectors, particularly if this investment takes place within an appropriate policy implementation framework such as the 2013-2023 National Aboriginal and Torres Strait Islander Health Plan. This has the potential to eliminate Aboriginal and Torres Strait
Islander unemployment if additional nursing employment is directed to areas of particularly high Aboriginal and Torres Strait Islander unemployment (also see Appendix II).

6.7 RESOURCE BOOM AND RESOURCE CURSE EFFECTS

Waning of the resource boom suggests the need for targeted public health investments to regenerate mining-affected Aboriginal and Torres Strait Islander communities.

6.8 IMPROVED GOVERNMENT BUDGETS

Estimated effects on government budgets arising from ‘Closing the Gap’ in Aboriginal and Torres Strait Islander employment and raising life expectancy over a twenty-year time period include a $11.9 billion net increase in government revenue and billion-dollar savings in ‘reactive’ expenditures on Aboriginal and Torres Strait Islander health (in particular, avoidable hospitalisations and deaths), social security, and public order and safety.

6.9 ECONOMY-WIDE BENEFITS

Achieving parity in employment and health outcomes would increase GDP/national income by 1.2% higher in real terms over a twenty-year period. This is equivalent to around $24 billion.

6.10 POLITICAL CHOICES AND PROMOTING PARITY

Very modest across-the-board gains in ‘Closing the Gap’ outcomes to date suggest the need to avoid cost-ineffective solo strategies aimed at achieving ‘Closing the Gap’ in one particular area. Investing in strengthening Australia’s Aboriginal and Torres Strait Islander nursing and midwifery workforce capacity is not only good health policy. It is a cost-effective strategy that would generate a range of cross-sector regional and national economic benefits.
Section 1: The Aboriginal and Torres Strait Islander nursing and midwifery workforce

1.1 Aboriginal and Torres Strait Islander nurses and midwives

The health workforce is the largest component of the health budget in Australia and nurses are the largest health profession (see Section 4.1). Substantial nursing workforce shortages are predicted in this ageing workforce in the next 15 years. Aboriginal and Torres Strait Islander people are proportionately more likely than non-Indigenous people to access nursing services (AHMAC 2012: 3.14).

Although Aboriginal and Torres Strait Islander nurses and midwives are the largest occupational group in the Aboriginal and Torres Strait Islander health professional workforce, and nursing is the most common health-related training course for Aboriginal and Torres Strait Islander undergraduate students, Aboriginal and Torres Strait Islander nurses and midwives represent only 0.9% of total employment in these professions. On a population basis, each Aboriginal and Torres Strait Islander nurse/midwife caters for 309 Aboriginal and Torres Strait Islander Australians, compared with 74 non-Indigenous Australians for each non-Indigenous nurse/midwife. The workforce is poorly distributed across States and Territories (see Sections 4.1, 4.4 and 4.5).

The extreme population parity gap between Aboriginal and Torres Strait Islander nurses and midwives and their non-Indigenous counterparts has serious implications for accessing health services and achieving good health outcomes. Recruitment and retention issues in the Aboriginal and Torres Strait Islander nursing workforce require urgent attention in view of imminent workforce shortages overall, and enduring ‘Closing the Gap’ deficits in health, education and employment. This report suggests that increasing Aboriginal and Torres Strait Islander nursing and midwifery employment is imperative on both economic and population health grounds.

1.2 The Congress of Aboriginal and Torres Strait Islander Nurses and Midwives

The Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM) is the national health professional organisation for Aboriginal and Torres Strait Islander nurses and midwives. Developing culturally informed pathways and training opportunities for Aboriginal and Torres Strait Islander people to pursue a professional career in nursing and midwifery is CATSINaM’s number one priority. Contributing to ‘Closing the Gap’ in health, education and employment outcomes for Aboriginal and Torres Strait Islander Australians is its long-term aim.
Four main strategic directions for CATSINaM for the three-year period from 2015 to 2018 have been developed to support CATSINaM’s long-term aim:

- Elevate the profile of CATSINaM as the national peak body representing Aboriginal and Torres Strait Islander nursing and midwifery.
- Strengthen our effectiveness in advocating on behalf of Aboriginal and Torres Strait Islander nurses and midwives.
- Strengthen our effectiveness in supporting the recruitment and retention of Aboriginal and Torres Strait Islander peoples in nursing and midwifery.
- Increase our active involvement in research and workforce development projects that realise the vision of CATSINaM.

CATSINaM programs and initiatives are supported by evidence-based research and monitored by process and impact indicators in its Strategic Plan. Membership is increasing rapidly, reaching 500 members by early 2015. External funding is required to enable CATSINaM program and service delivery. Internal income sources are also utilised, including membership charges (limited), sponsorship arrangements and fees for some services.

CATSINaM has proposed a range of activities and initiatives with associated budget requirements that address their strategic directions along with current Aboriginal and Torres Strait Islander nursing and workforce priorities in their 2015-2018 funding proposal. These are summarised in Table 1a and 1b together with their alignment with national Aboriginal and Torres Strait Islander health and workforce policies and key reviews (CATSINaM 2013a). These documents include:

- National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework (NATSIHWSF 2011)
- National Aboriginal and Torres Strait Islander Health Plan 2013–2023 (NATSIHP)
- COAG (Council of Australian Governments) National Partnership Agreement on ‘Closing the Gap’ in Aboriginal and Torres Strait Islander Health Outcomes (2009)
- Forrest Review: Creating Parity (2013)
- Review of Higher Education Outcomes for Aboriginal and Torres Strait Islander People (Behrendt et al, 2012)

The proposed initiatives are also consistent recommendations with the following documents:

- Review of Australian Government Health Workforce Programs (Mason 2013)
Table 1a: CATSInaM 2015-2018 priority regular activities and links with national policies and reports

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<tr>
<td>Activity 1: Enhance cultural safety and health outcomes (‘Cultural Safety Initiative 1’)</td>
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<td>Activity 2: CATSInaM Mentoring Program</td>
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<td>Activity 3: Professional development workshops on priority topics (includes ‘Cultural Safety Initiative 2’)</td>
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<td>Recs: 14; 18</td>
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<td>Activity 5: Expanding the Aboriginal and Torres Strait Islander nursing and midwifery workforce: Implications</td>
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</tbody>
</table>
A cost-effective approach to Closing the Gap in health, education and employment: Investing in Aboriginal and Torres Strait Islander nursing education, training and employment

Table 1a: CATSINaM 2015-2018 proposed initiatives and links with national policies and reports

<table>
<thead>
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</thead>
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<td>Rec: 1 to 5; 12; 13; 17 to 23; 25; 26</td>
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<td>Rec: 1; 2; 3; 5; 18; 19; 23; 29 to 35</td>
<td></td>
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<tr>
<td>Innovation 2: Support implementation of the Aboriginal Health Curriculum Framework in Schools of Nursing/ Midwifery</td>
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<td>Recs: 1 to 5; 13; 17 to 23</td>
<td>Reform: 2.1; 2.4; 2.5</td>
<td>Recs: 9; 14; 16</td>
<td>Recs: 1; 2; 3; 5; 8 to 12; 18 to 25; 33 to 35</td>
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<td>🌟</td>
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<tr>
<td></td>
<td>KPAs: 2; 4</td>
<td>Recs: 2; 15; 16; 23</td>
<td>Reform: 2.4; 2.5</td>
<td>Recs: 1; 2; 3; 18; 19</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
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<td>Recs: 1; 27; 28</td>
<td>Reform: 2.4; 2.5</td>
<td>Recs: 2 to 4; 6 to 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation 5: Career pathways from VET to university</td>
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<td>🌟</td>
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<tr>
<td></td>
<td>KPAs: 1; 3</td>
<td>Recs: 1; 15; 16; 27, 28</td>
<td>Reform: 2.4; 2.5</td>
<td>Recs: 13; 14; 20; 21</td>
<td>Recs: 1; 2; 4; 6; 8 to 12; 18 to 25</td>
<td></td>
</tr>
</tbody>
</table>
Section 2: The context

2.1 The people

Aboriginal and Torres Strait Islanders represent 3% of Australia’s population and account for 6% of all births (ABS census 2011, Burns et al. 2013). Health expenditure is not, however, commensurate with either population trends or relative health needs (Alford 2014, AMA 2013, Australian College of General Practitioners 2014, CtGSC 2015, RACGP 2014, RACP 2012a & 2012b, AHMAC 2012:3.21).

2.2 Health system performance

Health professionals need to be both clinically and culturally competent to achieve positive outcomes. While a number of health workforce policies and programs focus on recruiting and retaining doctors, addressing nursing and midwifery workforce issues is relatively neglected, and in particular, the disproportionately small number of Aboriginal and Torres Strait Islander nurses and midwives in Australia.

There is substantial evidence to support the urgent need to increase the Aboriginal and Torres Strait Islander nursing and midwifery workforce, with a focus on developing workforce capacity in primary health care services. These rely heavily on nurses, along with Aboriginal Health Workers, to provide the bulk of primary health care services. These services include early intervention, prevention, health education and health promotion.

The current system performs poorly when measured against leading indicators in the ‘Aboriginal and Torres Strait Islander Health Performance Framework’ (AHMAC 2012). Evidence includes deficits in all three tiers of this Framework, examples of which follow.

2.2.1 Tier 1 Health status and outcomes: Antenatal care and early child development

Key differences between Aboriginal and Torres Strait Islander and other Australians include:

- Child mortality ratios are 1.5 times higher for infants aged 0-1 years, 1.8 for 0-4 years and 2.8 for 1-4 years (Productivity Commission 2014: Table 4A. 2.1).

- Antenatal visits are 0.8 times the ratio, or 16% less for one antenatal visit in the first trimester of pregnancy and 12% fewer for five or more visits (Productivity Commission 2014: Table 6A1.7, 1.12).

- Teenage birth rates are 5.3 times higher than non-Indigenous birth rates, and 8.3 times higher for Aboriginal and Torres Strait Islander girls aged 16 or less (Productivity Commission 2014: Table 6A 3.2).
Maternal death rates are three times higher for Aboriginal and Torres Strait Islander women, and three times higher due to conditions related to pregnancy (Australian College of Nursing 2014:14).

Low birth weights of 2.5 times non-Indigenous rates have increased in the past decade and are directly related to poor maternal health among live born babies (Productivity Commission 2014: Table 6A. 4.1, 4.18).

Vulnerable physical health and wellbeing for Aboriginal and Torres Strait Islander children are 2.3 times higher at the age of 5 years than non-Indigenous children (Productivity Commission 2014).

2.2.2 Tier 2 Determinants of health: Education indicators

Aboriginal and Torres Strait Islander children’s school outcomes continue to languish, resulting in poor health and wellbeing in adult life, constricted employment opportunities and substantial barriers to further education and training in health-related professions.

SCHOOLING

English literacy and numeracy gaps, already substantial by Year 3, increase in secondary school and impact adversely on school retention, completion and transitions into further education and/or employment (Karmel et al. 2014, Productivity Commission 2014: Ch. 4.4, Tables 4A 4.25, 4.34). By the age of 15 years, Aboriginal and Torres Strait Islander students lag behind their non-Indigenous peers by approximately two and a half years in literacy, numeracy and science standards (PISA data in Forrest 2014: 84).

Gaps in Year 12 (or equivalent) retention rates have declined over the past decade, but remain substantial, as indicated in Table 2.

Nearly a half of Aboriginal and Torres Strait Islander students do not continue to Year 12. The 30% gap in Year 12 retention rates masks an even higher gap in completion rates because many Aboriginal and Torres Strait Islander senior secondary students drop out after school census data is collected at the beginning and middle of the school year.

Failure to commence or complete Year 12 is a door-closer for many young people. Combined with low average levels of elementary employability skills (literacy and numeracy), life chances and opportunities for Aboriginal and Torres Strait Islander young Australians remain relatively limited.

NON-SCHOOL QUALIFICATIONS

Among students currently studying, 5.9% of Aboriginal and Torres Strait Islander students have a Bachelor degree or higher, compared with 15.6% of non-Indigenous students for people aged 18 and over in 2011 (Productivity Commission 2014: Tables 4A 7.5-7.7).
Table 2: Retention rates of Aboriginal and Torres Strait Islander and non-Indigenous students, Australia, 2002, 2012

<table>
<thead>
<tr>
<th>Year/level</th>
<th>2002</th>
<th>2012</th>
<th>Percentage difference</th>
<th>2012</th>
<th>2012</th>
<th>Percentage difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aboriginal and Torres Strait Islander students</td>
<td>Non-Indigenous students</td>
<td>Percentage difference</td>
<td>Aboriginal and Torres Strait Islander students</td>
<td>Non-Indigenous students</td>
<td>Percentage difference</td>
</tr>
<tr>
<td>2007/2008 to 2009</td>
<td>97.8</td>
<td>99.8</td>
<td>-2</td>
<td>100</td>
<td>100</td>
<td>-0.5</td>
</tr>
<tr>
<td>2007/2008 to 2010</td>
<td>86.4</td>
<td>98.5</td>
<td>-12.1</td>
<td>98.4</td>
<td>100</td>
<td>-3</td>
</tr>
<tr>
<td>2007/2008 to 2011</td>
<td>58.9</td>
<td>88.7</td>
<td>-29.8</td>
<td>77.2</td>
<td>94.8</td>
<td>-17.6</td>
</tr>
<tr>
<td>2007/2008 to 2012</td>
<td>38</td>
<td>76.3</td>
<td>-38.3</td>
<td>51.1</td>
<td>81.3</td>
<td>-30.2</td>
</tr>
</tbody>
</table>

Sources: ABS in Karmel et al. 2014: 8; see also ROGS 2014: Table 4A.123.

Notes: (i) Table 2 measures apparent retention rates, the percentage of full-time students of a given cohort who continue from the start of secondary school to Year 12.

**Vocational education and training (VET)**

Although VET participation rates for Aboriginal and Torres Strait Islander people are higher than those of non-Indigenous people, 50% of all Australian VET qualifications completed by Aboriginal and Torres Strait Islander people are low-level (Certificates I and II), compared with 24% of other students’ qualifications according to 2010-2011 data (ABS census 2011, NVEAC 2013: 15-24, 28). Only 23% of all VET qualifications commenced by Aboriginal and Torres Strait Islander students are completed (Forrest 2014: 4, 10, 159; Productivity Commission 2014: Table 4A.7.37, 7.38).

**Higher education**

Nursing degree completion rates are over 30% lower than those of non-Indigenous students, and the gap has increased in the past few years (see Table 3a). Overall course pass rates among Aboriginal and Torres Strait Islander students are also lower than among non-Indigenous students (Karmel et al. 2014, Productivity Commission 2014: Table 4A.7.25).
2.2.3 Tier 2 Determinants of health: Employment and unemployment

“Employment outcomes for the first Australians remain poor and are getting worse.” (Forrest 2014: 7)

About 188,000 Aboriginal and Torres Strait Islander Australians, double the number currently working, will have to find work in the next five years if employment parity is to be achieved (Forrest 2014: 4). However, national Aboriginal and Torres Strait Islander unemployment rates have increased - from 15.5% in 2004-05 to 20.9% in 2011-13, compared with a decrease from 4.3% to 4.2% for non-Indigenous people. The proportion of the working-age Aboriginal and Torres Strait Islander population employed actually declined during this period from 50.7% to 47.5%, but increased from 74.2% to 76.6% for non-Indigenous people (Productivity Commission 2014: Tables 4A. 6.1, 6.8).

2.2.4 Tier 2 Determinants of health: Employment and education

High rates of disengagement from training and/or employment restrict the supply of potential higher education students. Only 40% of Aboriginal and Torres Strait Islander people aged 17-24 years are fully engaged in education, training or employment, compared with 76% of non-Indigenous young people. As Aboriginal and Torres Strait Islander education levels rise, employment increases, particularly at Bachelor level university and higher degrees (Karmel et al. 2014: 39, Productivity Commission 2014: Table 7A. 4.2-4.5, 9A.21, 24) – also see Appendix A.

2.2.5 Tier 3 Health system performance: Access to primary health care

Access to health services for Aboriginal and Torres Strait Islander Australians is considerably less than appropriate for the level of need (CtGSC 2015: 34). More than half of all Aboriginal and Torres Strait Islander avoidable death rates, already three times higher than in the non-Indigenous population, are due to under-utilisation of mainstream primary health care services (Productivity Commission 2014: Tables 8.A.1.44, 8A2.2, 2.7, 8A 3.1).

Developing Aboriginal and Torres Strait Islander nursing workforce capacity is critical to addressing three of the 'Four A' barriers to access primary and preventive health care services - service Availability, (cultural) Acceptability and Appropriateness (to health need). Combined with Affordability barriers, these four barriers persist in all States, Territories and geographical areas - major cities in particular (AHMAC 2012: 3.14, AIHW Australia 2014: Ch. 7, Alford 2014, NATSIHP 2013, RACP 2012a, Russell 2013).
2.2.6 Tier 3 Health system performance: Cultural competency

“It is peculiar… that as the most consulted and researched people in the country, we are the least listened to.” (Aboriginal and Torres Strait Islander health workshop participant, Universities Australia 2011 - see Section 5.8 Empowerment equals health)

“Health professionals need to be both clinically and culturally competent to genuinely affect positive outcomes” (Taylor et al. 2014). Culture is central to health and is highlighted in the National Aboriginal and Torres Strait Islander Health Plan (NATSIHP), the Aboriginal and Torres Strait Islander Health Performance Framework (NATSIHPF), and by Aboriginal and Torres Strait Islander women in ‘Talking Circles’ across Australia (AWHNTC 2009: 26, 36; 2010). Notwithstanding this emphasis, cultural competency issues continue to pervade mainstream health and training systems (AHMAC 2012: 3.08, Alford 2014, Behrendt et al. 2012, CtGSC 2015: 32, Mason 2013: 17-18). Hence it is not surprising that the Council of Australian Governments acknowledges “Aboriginal and Torres Strait Islander people’s reticence to use government services” (COAG 2012: B53).

2.2.7 Tier 3 Health system performance: Health workforce capacity and sustainability

“Increasing the size of the Aboriginal and Torres Strait Islander health workforce is fundamental to closing the gap in Aboriginal and Torres Strait Islander life expectancy.” (AHMAC 2012 Tier 3: 3.12)

The extremely small size of the Aboriginal and Torres Strait Islander nursing and midwifery workforce on a population basis is concerning in view of demonstrated links between (limited) Aboriginal and Torres Strait Islander workforce capacity, barriers to access to health services and primary health care services in particular, and continuing large and unacceptable gaps in health outcomes (AHMAC 2012: 3.12, Australian Government Department of Health 2013, CtGSC 2013, Mason 2013: 17, RACP 2012a & 2012b).

In December 2014, the Australian Government responded to the Forrest Review ‘Creating Parity’ report by declaring it would aim to increase Aboriginal and Torres Strait Islander employment in the Commonwealth public sector to 3% by 2018. It also set a target of 3% of Commonwealth procurement contracts to be awarded to Aboriginal and Torres Strait Islander suppliers by 2020. The Forrest Review recommends a 4% target for both employment and procurement (2013: recommendation 18, 21). These aims may not be achievable. Government agencies will be responsible for achieving these targets from within existing resources (Australian Government Budget Indigenous 2014). Prerequisites for increasing Aboriginal and Torres Strait Islander skilled employment are also lacking (see Sections 2.2.1 to 2.2.4).
Section 3: VET and higher education health and nursing

3.1 Health studies in the VET sector

VET study is more academically accessible than university study for many Aboriginal and Torres Strait Islander students, particularly in non-metropolitan areas. Literacy and numeracy, financial, geographical and other barriers are higher again in the university system (NCVEAC 2013: 19-20; see Sections 2.2.2, 5.2, 5.3).

Aboriginal and Torres Strait Islander people are over-represented in the VET system (5.4%) on a population basis (3.0%), particularly in the Northern Territory where 46% of the Aboriginal and Torres Strait Islander population are VET participants. A higher proportion of Aboriginal and Torres Strait Islander people in all age groups in Australia are enrolled in VET studies (26% of Aboriginal and Torres Strait Islander males and 22% of Aboriginal and Torres Strait Islander females, compared with 10% of non-Indigenous males and 9% of females; 2011 data for population aged 15-64 years; NVEAC 2013: 14, 15).

However, Aboriginal and Torres Strait Islander students are concentrated in lower level Certificates 1 and 11 (Section 2.2.2), and in short, bridging and enabling non-award courses. The latter focus on developing literacy, numeracy and work skills. 9% (1,183) of all Aboriginal and Torres Strait Islander VET students were enrolled in these courses in 2012, compared with 3% of non-Indigenous VET students. Of these, 82 Aboriginal and Torres Strait Islander students were enrolled in enabling/non-award courses in health in 2012 (PC 2014: Table 4A.7.16; NVEAC 2013: 16).

The gap in VET course completion rates is large in all jurisdictions, although considerably lower in the Northern Territory (NVEAC 2013: Tables 7,8,18). In health and community services, 6% (1,345 students) of all commencing apprentices and trainees in Australia in 2011 were Aboriginal and Torres Strait Islander but in the same year only 4% of completions were by Aboriginal and Torres Strait Islander students (NVEAC 2013: Tables 15, 20).

Entry points to a nursing degree from VET include from enrolled nursing (12 to 18 months VET training up to Diploma of Nursing) and Aboriginal Health Work (Certificates III-IV Aboriginal and Torres Strait Islander Primary Health Care (Practice). Entry from the most junior level of nursing, assistant nursing, depends on educational qualifications, having no nationally mandated minimum standard.

Overall completion rates in enrolled nursing VET courses are relatively low, at approximately 30% in 2011-12, compared with those in higher education nursing degrees (64%). However, the comparison is limited because many students commence enrolled nursing to complete specific modules rather than qualify as enrolled nurses (HWA 2014a full report: 22-23, 72). Data on Aboriginal and Torres Strait Islander enrolled nursing completion rates is not available.
Overall Aboriginal and Torres Strait Islander success rates in VET transition programs such as bridging and enabling courses are not known. The Australian Council for Educational Research reports that successful post-school transition programs for Aboriginal and Torres Strait Islander students are limited (ACER 2014). Multiple barriers to Aboriginal and Torres Strait Islander pathways and training pipelines into higher education include low levels of VET qualifications and lack of specific educational transition programs, including for Aboriginal and Torres Strait Islander students in health and other para-professional VET courses (Griffin 2014; Anderson 2011: 4). These are generally not provided, despite evidence of Aboriginal and Torres Strait Islander students’ poor literacy and numeracy skills, relatively low Year 12 completion rates (Section 2.2.2) and the extent of participation in VET bridging and enabling courses.

3.2 Higher education nursing commencement and completion rates

The term ‘nurses’ includes midwives in most nursing workforce reports (ANMF 2014). Registered nurses must complete a three-year university degree before they are eligible to register with the Nursing and Midwifery Board of Australia (NMBA). They then complete an average of twelve months’ post-registration graduate support in a nursing or aged care setting. They may undertake post-graduate study to specialise in a clinical area and with these qualifications seek endorsement as a Nurse Practitioner, the most senior level of nursing practice.

Aboriginal and Torres Strait Islander Australians are under-represented as students and staff in the higher education system (Taylor et al. 2014: 5; Universities Australia 2014; AHMAC 2012: 3.20). The most popular course for Aboriginal and Torres Strait Islander students has become health, in which Aboriginal and Torres Strait Islander higher education enrolments have increased over the past five years by 13% annually, compared with 8% for non-indigenous students. By 2012, 19% of all Aboriginal and Torres Strait Islander higher education students were enrolled in health courses, compared with 15% of non-Indigenous students (PC 2014: Table 4A7.16).

Completion rates are much lower. Table 3a and data sources in Table 3b summarise Aboriginal and Torres Strait Islander and non-Indigenous completion rates for four cohorts of students tracked from commencement between 2007 and 2010 to completion. The Aboriginal and Torres Strait Islander proportion of all commencing students is compared with the proportion completing the degree.

Table 3 assumes a three-year degree; longer term data is more likely to include delayed and deferred graduations. Table 3 indicates:

- About a third of Aboriginal and Torres Strait Islander students complete nursing degrees, compared with two-thirds of non-Indigenous students (2010-12).

- Nursing commencement rates for Aboriginal and Torres Strait Islander students more than doubled non-Indigenous commencement rates during the period (51% compared with 22% between 2007 and 2010).
Table 3a: Higher education nursing completion rates, Aboriginal and Torres Strait Islander and non-Indigenous students, Australia, 2007-2012: Percentage of commencing students completing degree

<table>
<thead>
<tr>
<th>Commencement to completion period</th>
<th>Aboriginal and Torres Strait Islander</th>
<th>Non-Indigenous</th>
<th>Gap</th>
<th>Aboriginal and Torres Strait Islander proportion of all commencing students</th>
<th>Aboriginal and Torres Strait Islander proportion of all completing students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2009 cohort</td>
<td>45.8</td>
<td>66.8</td>
<td>21.0</td>
<td>1.6%</td>
<td>0.9%</td>
</tr>
<tr>
<td>2008-2010 cohort</td>
<td>44.0</td>
<td>69.6</td>
<td>25.6</td>
<td>1.7%</td>
<td>1.0%</td>
</tr>
<tr>
<td>2009-2011 cohort</td>
<td>36.9</td>
<td>66.7</td>
<td>29.8</td>
<td>1.9%</td>
<td>1.0%</td>
</tr>
<tr>
<td>2010-2012 cohort</td>
<td>33.9</td>
<td>65.0</td>
<td>31.1</td>
<td>2.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Average 2007-2012</td>
<td>39.4</td>
<td>66.9</td>
<td>27.5</td>
<td>1.7%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

Table 3b: Data for Table 3a on higher education nursing completion rates, Aboriginal and Torres Strait Islander and non-Indigenous students, Australia

<table>
<thead>
<tr>
<th>Nursing degree</th>
<th>Aboriginal and Torres Strait Islander completions and commencements</th>
<th>Non-Indigenous completions and commencements</th>
<th>Extra Indigenous with parity in completion rates (Col. 3 – Col. 1)</th>
<th>Net extra required</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2009</td>
<td>92 of 201</td>
<td>8,800 of 13,168</td>
<td>134</td>
<td>42</td>
</tr>
<tr>
<td>2008-2010</td>
<td>96 of 218</td>
<td>9,272 of 13,326</td>
<td>152</td>
<td>56</td>
</tr>
<tr>
<td>2009-2011</td>
<td>90 of 244</td>
<td>9,931 of 14,896</td>
<td>163</td>
<td>73</td>
</tr>
<tr>
<td>2010-2012</td>
<td>103 of 304</td>
<td>10,433 of 16,056</td>
<td>198</td>
<td>95</td>
</tr>
<tr>
<td>Total</td>
<td>381 of 967</td>
<td>38,436 of 57,446</td>
<td>647</td>
<td>266</td>
</tr>
</tbody>
</table>

Sources: 2007-2012 data provided to CATSINaM by HWA from Commonwealth Department of Education Higher Education. Data excludes the relatively small number of students whose Aboriginal and Torres Strait Islander status is not known or stated (an average of 190 students or just over 1% of all students a year).
Aboriginal and Torres Strait Islander student completion rates increased more slowly (by 12%) compared with non-Indigenous students (19%) between 2009 and 2012.

As a proportion of commencements, Aboriginal and Torres Strait Islander completion rates have fallen significantly (from 46% to 34%).

Non-Indigenous completion rates have remained relatively stable.

The resulting gap in completion rates increased from 21% in 2007-09 to 31% in 2010-12.

The Aboriginal and Torres Strait Islander footprint in higher education nurse training is very small, and shrinks from commencement (1.7% of all nursing students) to completion at 1%. This is well below population parity (3%).

If Aboriginal and Torres Strait Islander nursing graduation rates were the same as those for non-Indigenous graduates, there would have been 266 more Aboriginal and Torres Strait Islander graduates between 2009 and 2012, and 95 more graduates in 2012 alone.

### 3.3 Creating parity in higher education

Aboriginal and Torres Strait Islander students in general lack adequate tertiary preparation for higher education, resulting in low completion rates (Pechenkina & Anderson 2011). The number of Aboriginal and Torres Strait Islander nursing graduates is too low to contribute to ‘Closing the Health Gap’ targets or reducing nursing workforce shortfalls in the coming years (see Tables 3, 4 and 6).

Gaps between Aboriginal and Torres Strait Islander nursing and completion rates compared with non-Indigenous students suggest that system-wide rather than individual barriers are continuing to impede progress in Aboriginal and Torres Strait Islander nursing training outcomes. The literature suggests that the most significant barriers to entry and successful outcomes are financial and living away from home pressures, limited visibility of Aboriginal and Torres Strait Islander cultures and knowledge in universities, social and cultural alienation from mainstream academic culture, governance and academic standards, and insufficient academic support (Behrendt et al. 2012, Pechenkina & Anderson 2011).

There is no evidence that these negative influences have waned in recent years. Indeed, the opposite is much more likely in view of government higher education policy reforms (see Section 5.7 and Appendix I). The Commonwealth has set an aspirational national parity target for Aboriginal and Torres Strait Islander students and staff in higher education, equivalent to the proportion of the population aged between 15 and 64 years (2.5%), which is lower than the overall population parity of 3.0% (ABS 2011 census. Australian Government 2013: 11). Attainment of this target will require policy and funding adjustments (see Sections 5.3 and 5.7).
Section 4: Nursing and midwifery workforce

4.1 Australian nursing and midwifery workforce needs and projections

Nurses and midwives are the largest health professional group (60% in 2012), which is three times larger than the next largest, medical practitioners (AIHW Australia 2014: 60). Within the profession, 76% are registered nurses, 15% enrolled nurses and 9% midwives according to 2013 data (AIHW 2014). This represents a substantial and largely government investment in nursing and midwifery training and employment. Economic and health gains will result from coordinated planning and deployment of this workforce to ensure alignment of nursing supply with demand and a sustainable nursing workforce for Australia (HWA 2014a). However, “while a suite of policies and programs exist for recruitment and retention of doctors, this is less so for nurses and midwives” (HWA 2012, Vol: 28).

Ninety per cent of all nurses are women. The registered and enrolled nursing workforces are both ageing; 23% are over 55 years and the average age is 44 years. More than a half contemplate retirement in the next 10 to 15 years, and about half work part-time (less than 35 hours a week), generally 32 hours a week on average. A declining proportion of all nurses work in the public health sector (55% in 2012 compared with 62% in 2009). About 90% of all Australian nurses work in clinical practice. The acute and aged care sectors are the largest for the profession, with 12% of the overall nursing workforce working in primary health care. Areas such as mental health and aged care are at particular risk for nursing shortages (ANMF 2014: 11-12, Australian Government Gender 2014, HWA Nurses 2013: 15, 24, HWA 2014a: 8-9, HWA 2014a full report: 8-28).

An imminent and acute overall nursing workforce shortage is predicted in Australia based on population health trends, including an ageing population with more complex health needs combined with an ageing nursing workforce and poor workforce retention rates among early career nurses (HWA 2014a: vii).

The nursing workforce supply and demand projections presented in Table 4 assume that existing workforce supply and service use trends will continue into the future. That is, that existing government policy and overall economic conditions remain stable. Table 4 summarises these projections for registered and enrolled nurses between 2012 and 2030, as measured by estimated shortfalls (demand exceeds supply) or excess workforce (supply exceeds demand).

The data in Table 4 indicates that highly significant nursing supply shortages will develop by 2016, and the gap between constrained supply and excess demand gradually increases over the projected period to over 122,000 nurses by the year 2030 (ACN 2014: 23, HWA 2012 Vol 1: 1). Projections suggest substantial shortages of both registered and enrolled nurses, but not of midwives. Midwifery supply/demand is projected to be in approximate balance for the projected period (HWA 2012 Vol 1: 1) - also see Section 4.5.
Table 4: Registered and enrolled nurses, projections, Australia, 2012-2030

<table>
<thead>
<tr>
<th>Headcount</th>
<th>2012</th>
<th>2016</th>
<th>2018</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>263,212</td>
<td>281,491</td>
<td>279,206</td>
<td>273,522</td>
<td>271,657</td>
</tr>
<tr>
<td>Demand</td>
<td>263,212</td>
<td>292,942</td>
<td>307,625</td>
<td>358,879</td>
<td>394,503</td>
</tr>
<tr>
<td>Excess/Shortfall</td>
<td>0</td>
<td>-11,451</td>
<td>-28,419</td>
<td>-85,357</td>
<td>-122,846</td>
</tr>
</tbody>
</table>

Source: HWA 2014a Overview: Table 7.

The magnitude of the gap suggests the urgent need for changes in policy and/or economic conditions that lead either to constrained demand for nurses or increases in supply. Even in more favourable conditions however, the gap will remain large. Lead times required to redress existing and future shortages are long and suggest the need for timely action: “Continuing to use the same policy parameters and models to deliver health service into the future may not be sustainable” (HWA 2012: Vol. 1: 1).

4.2 Trends in Aboriginal and Torres Strait Islander health professional employment, 1996 to 2011

The Aboriginal and Torres Strait Islander health professional workforce has increased substantially over the past 10 to 15 years, although growth has been uneven in occupational sub-categories. Table 5 summarises growth between 1996 and 2011 in six main occupations in Aboriginal and Torres Strait Islander health employment for which long-term data is available.

Table 5 indicates a number of trends including

- Substantial growth in Aboriginal and Torres Strait Islander nursing employment, particularly in the past decade, and slightly more than overall Aboriginal and Torres Strait Islander health professional employment.

- Aboriginal and Torres Strait Islander nursing employment growth has been lower than in the medical and medical specialist professions and significantly lower than in the largest allied health professions combined.

- The Aboriginal and Torres Strait Islander footprint in Australia’s health professional workforce overall has increased by 1% over the past decade, and remains well below population parity.
A cost-effective approach to Closing the Gap in health, education and employment: Investing in Aboriginal and Torres Strait Islander nursing education, training and employment

Table 5: Aboriginal and Torres Strait Islander employment in selected health profession-related occupations, Australia, 1996-2011

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All nurses (i)</td>
<td>1,258</td>
<td></td>
<td>1,123</td>
<td></td>
<td>2,171</td>
<td></td>
<td>4.8</td>
<td>9.3</td>
</tr>
<tr>
<td>Aboriginal Health Worker</td>
<td>667</td>
<td></td>
<td>853</td>
<td></td>
<td>1,255</td>
<td></td>
<td>5.9</td>
<td>4.7</td>
</tr>
<tr>
<td>Allied health (ii)</td>
<td>167</td>
<td></td>
<td>262</td>
<td></td>
<td>701</td>
<td></td>
<td>21.3</td>
<td>16.8</td>
</tr>
<tr>
<td>Dental (iii)</td>
<td>147</td>
<td></td>
<td>155</td>
<td></td>
<td>319</td>
<td></td>
<td>7.8</td>
<td>10.6</td>
</tr>
<tr>
<td>Medical practitioners (iv)</td>
<td>61</td>
<td></td>
<td>90</td>
<td></td>
<td>175</td>
<td></td>
<td>12.5</td>
<td>9.4</td>
</tr>
<tr>
<td>Ambulance/paramedical officers</td>
<td>49</td>
<td></td>
<td>83</td>
<td></td>
<td>216</td>
<td></td>
<td>22.7</td>
<td>16.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,349</td>
<td></td>
<td>2,566</td>
<td></td>
<td>4,837</td>
<td></td>
<td>7.1</td>
<td>8.9</td>
</tr>
<tr>
<td>Proportion of total health professional employment (v)</td>
<td>0.7%</td>
<td></td>
<td>0.8%</td>
<td></td>
<td>1.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Notes:

(i) Nurses include all nursing levels, midwives, nurse manager, educators and researchers. The downturn in nursing between 1996 and 2001 was largely due to a big reduction in enrolled and mothercraft nursing employment.

(ii) Allied health covers eight main sub-occupations: dietetics, optometry, psychology, physiotherapy, podiatry, speech pathology and audiology, occupational therapy and social work.

(iii) Dental covers practitioner, assistant & technical. Aboriginal and Torres Strait Islander dentists are the smallest sub-occupation, accounting for 7% of Aboriginal and Torres Strait Islander employment in this occupation in 2011.

(iv) Medical practitioner covers general medical practitioners (GPs) and medical specialists.

(v) Total health professional employment includes some other sub-occupations as well as those in Table 5. Longitudinal data is not available for aged and disabled carers, and welfare support workers. These are the largest occupational sub-groups in Aboriginal and Torres Strait Islander health employment in 2011 (Mason 2013: 188).
4.3 Current Aboriginal and Torres Strait Islander footprint in the nursing and midwifery profession

The largest occupational group in Aboriginal and Torres Strait Islander health professional employment is nurses and midwives. They account for over a half (52%) of all Aboriginal and Torres Strait Islander professional employment (ABS 2011 census, AIHW Australia 2014: 60, Mason 2013: 187-188). Growth in the Aboriginal and Torres Strait Islander proportion for the profession over the past decade is summarised in Table 6 based on 2003 and 2013 data. This slow growth needs to considered in the light of the current Australian Government aim of 3% Aboriginal and Torres Strait Islander public sector employment by 2018.

Table 6: Aboriginal and Torres Strait Islander nurses and midwives employment, Australia, 2003, 2013

<table>
<thead>
<tr>
<th>Employment Category</th>
<th>2013</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered nurses</td>
<td>1,745</td>
<td>688</td>
</tr>
<tr>
<td>Enrolled nurses</td>
<td>856</td>
<td>442</td>
</tr>
<tr>
<td>Midwives (i)</td>
<td>186</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,787</td>
<td>1,130</td>
</tr>
<tr>
<td>2011 census population</td>
<td>669,881</td>
<td>2.2</td>
</tr>
</tbody>
</table>


Note: (i) 2003 RN data appears to include midwives.

---

1 Reports vary as to what occupations are included in the health professional workforce. AIHW health practitioner categories cover fewer highly skilled professions, i.e. 13 excluding Chinese medicine (AIHW Australia 2014, 60). A broader range (43) including lower skilled occupations is included in 'The Review of Australian Government Health Workforce Programs' (Mason 2013, 187-188). This report relies on AIHW categories given that nurses are a relatively highly qualified occupation and the report focuses on the professional workforce.
Table 6 indicates:

- A rapid increase of 14.7% annually in Aboriginal and Torres Strait Islander nursing and midwifery employment.
- An increase in the Aboriginal and Torres Strait Islander proportion of the nursing and midwifery workforce employment over the last decade (from 0.5% to 0.9%).
- The Aboriginal and Torres Strait Islander footprint in nursing is much smaller (0.9%) than in the overall Aboriginal and Torres Strait Islander health workforce (1.8% in 2011), although it is larger than in the medical and many allied health professions (Mason 2013: 187-188).
- The proportion of Aboriginal and Torres Strait Islander nurses and midwives (0.9%) remains small relative to the Aboriginal and Torres Strait Islander population (3%) and for registered nurses only is particularly small (0.7%).

There is a lack of detailed information available on the composition or characteristics of Aboriginal and Torres Strait Islander nurses and midwives. What is known is that their age profile is younger than among non-Indigenous nurses but average working hours similar, and that 77% work in clinical areas (HWA 2014a full report: 58-60). ACCHS-specific data indicates that many Aboriginal and Torres Strait Islander nurses and midwives work in Aboriginal Community Controlled Health Services (ACCHS), where they represent 21% of all clinical staff. 15% of nurses and 11% of midwives in community-controlled health organisations are Aboriginal and Torres Strait Islander, a considerably higher proportion than in the overall nursing and midwifery workforce (NACCHO ACCHS OSR data 2012-13 in Alford 2014: Table 16).

**4.4 Current Aboriginal and Torres Strait Islander nursing and midwifery employment, distribution by jurisdictions**

Table 7 summarises the distribution of Aboriginal and Torres Strait Islander nurses and midwives by State/Territory compared with distribution of the total Aboriginal and Torres Strait Islander population in Australia in 2011.

The distribution of nurses and midwives across Australia by jurisdiction in Table 7 indicates

- A very small ratio (0.3%) of Aboriginal and Torres Strait Islander nurses and midwives to the Aboriginal and Torres Strait Islander population in Australia.
- A particularly small ratio on a population basis in the Northern Territory (0.1%), WA (0.2%) and Queensland (0.3%).
- These distribution patterns reflect the particular challenges of recruitment and retention in predominantly rural and remote areas (see Section 5.5).
### Table 7: Aboriginal and Torres Strait Islander nurses and midwives employment, total Aboriginal and Torres Strait Islander population, by State and Territory, 2011

<table>
<thead>
<tr>
<th></th>
<th>NSW</th>
<th>VIC</th>
<th>QLD</th>
<th>WA</th>
<th>SA</th>
<th>TAS</th>
<th>ACT</th>
<th>NT</th>
<th>AUST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered nurses (No.) (i)</td>
<td>497</td>
<td>210</td>
<td>361</td>
<td>113</td>
<td>95</td>
<td>77</td>
<td>19</td>
<td>41</td>
<td>1,414</td>
</tr>
<tr>
<td>Enrolled nurses (No.)</td>
<td>353</td>
<td>100</td>
<td>184</td>
<td>51</td>
<td>71</td>
<td>27</td>
<td>6</td>
<td>6</td>
<td>798</td>
</tr>
<tr>
<td>Total Aboriginal and Torres Strait Islander nurses &amp; midwives (No.)</td>
<td>850</td>
<td>310</td>
<td>545</td>
<td>164</td>
<td>167</td>
<td>103</td>
<td>25</td>
<td>47</td>
<td>2,212</td>
</tr>
<tr>
<td>Total Aboriginal and Torres Strait Islander employment (No.) (ii)</td>
<td>50,100</td>
<td>12,000</td>
<td>53,400</td>
<td>22,100</td>
<td>9,100</td>
<td>7,600</td>
<td>1,800</td>
<td>17,700</td>
<td>173,800</td>
</tr>
<tr>
<td>Total Aboriginal and Torres Strait Islander population (No.)</td>
<td>208,476</td>
<td>47,333</td>
<td>188,954</td>
<td>88,270</td>
<td>37,408</td>
<td>24,165</td>
<td>6,160</td>
<td>68,850</td>
<td>669,881</td>
</tr>
<tr>
<td>Nurses &amp; midwives proportion of Aboriginal and Torres Strait Islander population (%)</td>
<td>0.4</td>
<td>0.7</td>
<td>0.3</td>
<td>0.2</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Aboriginal and Torres Strait Islander proportion of total nurses and midwives employment (%)</td>
<td>1.1</td>
<td>0.4</td>
<td>1.0</td>
<td>0.6</td>
<td>0.6</td>
<td>1.4</td>
<td>0.5</td>
<td>1.4</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Sources: AIHW 2012 NaM; ABS 2012 LF; ABS census 2011.  
Note: (i) The registered nurses category include midwives within this data.
Improved data and further investigation is required to address the reasons for this distribution and the relationship between Indigenous and total nursing and midwifery employment patterns by jurisdiction and geographical area (see AIHW 2014a data).

4.5 Aboriginal and Torres Strait Islander nursing, midwifery and health workforce needs

“The capacity to recruit and retain appropriate staff is critical to the appropriateness, continuity and sustainability of health services, including Aboriginal and Torres Strait Islander primary health care services.” (AHMAC 2012: 169)

The parity gap between Aboriginal and Torres Strait Islander nurses and midwives and their non-Indigenous counterparts is extreme (see Section 4.3). The ratio of Aboriginal and Torres Strait Islander nurses/midwives to the Aboriginal and Torres Strait Islander population is tiny compared with non-Indigenous ratios (see Section 1.1).

The extremely small size of the Aboriginal and Torres Strait Islander nursing and midwifery workforce on a population basis is concerning in view of demonstrated links between (limited) Aboriginal and Torres Strait Islander workforce capacity, barriers to accessing health services - primary health care services in particular, and continuing large and unacceptable gaps in health outcomes (AHMAC 2012: 3.12, 3.22, Australian Government Department of Health 2013, CtGSC 2013, Mason 2013: 17, 186-188, RACP 2012a & 2012b). Evidence of Aboriginal and Torres Strait Islander people’s underutilisation of mainstream primary health care services highlights the urgency of the need to increase Aboriginal and Torres Strait Islander nursing and midwifery employment (see Section 2.2).

Although well over half of all Aboriginal and Torres Strait Islander Australians visit Aboriginal Community-Controlled Health Services (ACCHS) annually and ACCHS out-perform mainstream services, the supply of ACCHS is limited in all jurisdictions and geographical areas. ACCHS struggle with attracting and retaining Aboriginal and Torres Strait Islander health professionals to meet increasing demand (Alford 2014, CtGSC 2015: 35). Their inability due to budget constraints to offer wage parity comparable to other health sectors is one cause. Others include Australian government recruitment and employment freezes in the public service and jurisdictional imbalances in the distribution of nurses. Predicted substantial nursing shortages in the next fifteen years will aggravate the situation (see Table 4).

The health workforce does not reflect current and future needs in its make-up and distribution (Russell 2015), and in particular, Aboriginal and Torres Strait Islander health workforce current and future needs. General health workforce needs analysis is limited in this respect, owing to the relatively small number of Aboriginal and Torres Strait Islander people and health professionals in the total population and their geographical distribution. As a result, what may seem like a minor shortfall or excess in overall employment may not apply to the Aboriginal and Torres Strait Islander health workforce.
In midwifery for example, approximate equilibrium in national supply and demand until 2025 is predicted (HWA 2012: Vol. 1: Table 34). This is not the case, however, in relation to Aboriginal and Torres Strait Islander midwifery workforce needs, given substantially higher Aboriginal and Torres Strait Islander birth rates (6% of all Australian births compared to an overall population representation of 3%), pregnancy, antenatal, postnatal and infant health issues (Burns et al. 2013) – also see Section 2.2.1.

Limited capacity in the Aboriginal and Torres Strait Islander health professional workforce, particularly nurses and GPs, is reflected in the continuing predominance of non-Indigenous clinical health professional staff, including in Aboriginal and Torres Strait Islander-specific health services (Alford 2014). Substantial growth in the Aboriginal and Torres Strait Islander nursing workforce will be required to meet parity population targets and rapid increases in demand for Aboriginal and Torres Strait Islander primary care health services. Increasing overall nursing workforce shortages will intensify this need (AHCSA 2014, Alford 2014, Behrendt et al. 2012, HWA 2014a: 20, Mason 2013).

Further investigation is needed to establish Aboriginal and Torres Strait Islander nursing and midwifery workforce trends and needs by jurisdiction and geographical areas. Moreover, while there is attention to increasing the Aboriginal and Torres Strait Islander health workforce in rural and remote areas, building an urban workforce remains a challenge (Mason 2013: 190).

### 4.6 Addressing shortages and achieving parity in Aboriginal and Torres Strait Islander nursing and midwifery employment

#### 4.6.1 Shortages and lack of focus on primary health care

“A strong (well-trained and well-resourced) workforce lies at the crux of a functional and efficient health system that can deliver comprehensive, timely, high quality and culturally appropriate services to Aboriginal peoples.” (Royal Australasian College of Physicians 2012b: 12)

Relative to population and health needs, a significant shortfall in the Aboriginal and Torres Strait Islander health professional workforce is a major barrier to accessing effective and appropriate primary and preventative health care. Health systems with a strong primary health care focus are more efficient, have fewer health inequities and provide better outcomes (Australian Government Department of Health 2013).

Health expenditure patterns provide indirect evidence of a lack of focus on Aboriginal and Torres Strait Islander primary health care services and employment. Aboriginal primary health care reports indicate chronic Aboriginal and Torres Strait Islander health workforce shortages, attraction and retention issues in all jurisdictions and geographical areas (HWA 2014a full report: 8; Alford 2014).
An effective primary health care model that engages Aboriginal and Torres Strait Islander communities and involves them in service management and delivery would provide a good guide to primary health care workforce policy and planning. The Northern Territory Primary Health Care model developed in 2011 is exemplary in principle. Based on a partnership between the Northern Territory (NT) Government and ACCHS sector through the NT Aboriginal Health Forum, the NT comprehensive primary health care service model is based on regional and greater Aboriginal Community Controlled service engagement and management (Lowitja Institute 2011).

In practice, improved outcomes in the NT have been limited in areas such as diabetes management due to lack of government investments in primary health care (Thomas et al. 2014). This highlights the need to align policy and funding in Aboriginal and Torres Strait Islander health professional workforce and health service development (see Section 5.7).

### 4.6.2 Parity targets

Population parity targets are recommended to achieve equity or equivalence between Aboriginal and Torres Strait Islander and non-Indigenous participation in higher education (Behrendt et al. 2014). They should also be applied to the professional health workforce. The Forrest Review recommends a target of 4% (for the public service), which it considers feasible if phased in with an annual 1% increase over four years and accompanied by clear and transparent “creating parity” performance monitoring by government (Australian Government Budget Indigenous 2014; Forrest 2014: recommendations 18, 21).

In response to the Forrest Review, the Australian Government will aim to increase Aboriginal and Torres Strait Islander employment in the Commonwealth public sector to 3% by 2018, as well as set a target of awarding 3% of all Commonwealth procurement contracts to Aboriginal and Torres Strait Islander suppliers by 2020 (Australian Government Budget Indigenous 2014). The Business Council of Australia nominally supports Aboriginal and Torres Strait Islander employment targets but claims that 4% is an unrealistic target (Business Council of Australia 2014).

A population health approach would require increasing Aboriginal and Torres Strait Islander nursing and midwifery employment, currently 0.9% of employment in these occupations, to 3%, which is equivalent to Aboriginal and Torres Strait Islander Australian’s proportion of the total population. This is recommended in the’ Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People’ and by the ‘Royal Australasian College of Physicians’ (Behrendt et al. 2012, RACP 2012a). The need is highlighted by strong evidence of Aboriginal and Torres Strait Islander people’s disproportionately greater health needs, which the Royal Australasian College of Physicians estimates are at least double those of the non-Indigenous population (RACP 2012a: 6).

A 3% population-based parity approach is also equivalent to the government’s recently recommended Aboriginal and Torres Strait Islander employment target for the Australian public service. However, current Aboriginal and Torres Strait Islander nursing and midwifery employment levels fall well short of the number required to meet population parity, as indicated in Table 8.
Table 8 compares the number of current Aboriginal and Torres Strait Islander nurses and midwives in Australia (Column 1) and their proportion of total employment in these occupations (Column 3) with estimates based on a population parity target and recently stated government aim for the public service (Column 4). This enables scrutiny of the gap between current Aboriginal and Torres Strait Islander employment and parity employment in nursing and midwifery. Additional estimated employment required to meet this target is presented in Column 5.

Table 8 Aboriginal and Torres Strait Islander nursing and midwifery workforce needs: current and estimated parity employment levels, 2013

<table>
<thead>
<tr>
<th></th>
<th>Current nurses and midwives</th>
<th>Population parity and Australian Government target: 3%</th>
<th>Additional required to achieve population parity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aboriginal and Torres Strait Islander employment No.</td>
<td>Total employment No.(i)</td>
<td>Aboriginal and Torres Strait Islander proportion of total employment %</td>
</tr>
<tr>
<td>Registered nurses</td>
<td>1,745</td>
<td>238,596</td>
<td>0.73%</td>
</tr>
<tr>
<td>Enrolled nurses</td>
<td>856</td>
<td>48,461</td>
<td>1.77%</td>
</tr>
<tr>
<td>Midwives</td>
<td>186</td>
<td>23,018</td>
<td>0.81%</td>
</tr>
<tr>
<td>Total nurses and midwives</td>
<td>2,787</td>
<td>310,075</td>
<td>0.90%</td>
</tr>
</tbody>
</table>

Sources: 2013 data in AIHW 2014; Australian Government Budget Aboriginal and Torres Strait Islander 2014; 2011 census.

Notes

(i) Total employment excludes 9,412 people whose Aboriginal and Torres Strait Islander status is not stated or known (6,475 RN, 2,497 EN, 440 midwives).

(ii) Column 5 represents additional employment needed to meet a parity target of 3% (i.e. Column 4 less Column 1).
In order to estimate the increase in Aboriginal and Torres Strait Islander employment required to meet the population parity target and recent Australian Government stated aim of 3%, Table 8 assumes that current (2013) total nursing and midwifery employment remains stable, at 301,075 people. Ideally, the employment of 6,516 additional Aboriginal and Torres Strait Islander nurses and midwives should increase overall employment by at least this number, in view of imminent nursing shortages in the short and long term (see Section 4.1 Table 4).

Highlights from Table 8 include:

- The substantial magnitude of growth in employment needed to create employment parity, particularly for registered nurses, given their particularly small Aboriginal and Torres Strait Islander footprint (0.73%) in this occupation.

- Additional employment of 6,516 Aboriginal and Torres Strait Islander nurses and midwives will be required to achieve employment parity in the current nursing and midwifery workforce. If phased in by a 1% annual increase this would mean an additional 2,172 Aboriginal and Torres Strait Islander nurses annually.

- 83% of the additional required employment required is of registered nurses.

A phased implementation period is recommended, of a minimum of 1% increase annually over three years. This target should inform Aboriginal and Torres Strait Islander health workforce policy and planning and be monitored and reported (see Sections 5.6 and 5.7).
Section 5: Training, recruitment and retention issues and recommendations

5.1 Macro reform: Linking health, education and employment

Aboriginal and Torres Strait Islander health, education and employment are integrally connected. Building an Aboriginal and Torres Strait Islander health professional workforce is critical to achieving high quality health care and improved health outcomes for Aboriginal and Torres Strait Islander Australians. Investing in the Aboriginal and Torres Strait Islander health professional workforce generates additional economic benefits (AHMAC 2012: 3.12, CtGSC 2015, Mason 2013: 17). As the major employer of nurses and midwives, the States and Territories are responsible for recruitment and retention. The Australian Government, however, plays an important role in funding health services and university education of nurses and midwives.

“Improving the representation of Aboriginal and Torres Strait Islander Australians in the health workforce will require collaboration between the health and education sectors and across a range of fronts.” (AHMAC 2012: 3.12)

Recommended Australian Government roles include: incentive-based funding systems that focus stakeholders on the development of priority professional pipelines through the education, training and employment systems; transparent measurement and monitoring of performance; a greater Aboriginal and Torres Strait Islander focus on VET higher-level courses; and a cultural competency and performance measurement framework that is standardised throughout the higher education system (Anderson 2011: 5, Behrendt et al. 2012, Mason 2013: recommendation 5.5, Universities Australia 2014).

As the national health professional organisation representing Aboriginal and Torres Strait Islander nurses and midwives, CATSINaM should be resourced to monitor and review these developments, as well as initiate and contribute to more effective partnerships of national health, education and policy organisations.

5.2 Developing pathways to nursing careers

According to the Forrest Review, about 90% of Aboriginal and Torres Strait Islander VET training is for “multiple low-level and irrelevant certificates”, primarily government-funded and a waste of resources. They should be redirected to higher level training that is recognised by employers and leads to guaranteed jobs (Forrest 2013: 10, 154-159). Fifty per cent of all Aboriginal and Torres Strait Islander VET qualifications are Certificates I and II (see Section 2.2.2). However, no provider can guarantee future employment and these recommendations may aggravate existing labour
market disadvantages by excluding vulnerable job seekers from the VET system due to a perceived higher risk that they may not complete training (Group Training Australia 2014).

Current pathways are limited, lack visibility and are far from the ideal of the “Creating Walking Tracks to Success” initiative (West 2013: 296-297; AHMAC 2012: 3.12). Aboriginal and Torres Strait Islander young people are less knowledgeable about possible careers than non-Indigenous youth, and are more likely to pursue a health professional career if their school actively promotes health as an attractive and meaningful career option (Orima 2010: 7-10, NVEAC 2013: 10). Aboriginal and Torres Strait Islander students often feel uncomfortable approaching mainstream career advisors and prefer Aboriginal and Torres Strait Islander education advisors, family and friendship networks (Mission Australia 2013: 3). Continued Australian government funding is uncertain for professional health career programs for Aboriginal and Torres Strait Islander young people, including the successful Murra Mullangari program initiated by national Aboriginal and Torres Strait Islander health professional organisations (CtGSC 2013: 4).

Pathway development can only be effective if there is significant pool of ‘tertiary education ready’ students. Highly disadvantaged ‘minority’ students are unlikely to fare well in education and training in the absence of specialised support. For Aboriginal and Torres Strait Islander students this requires early intervention from primary school level through effective literacy and numeracy policies, and more visible vocational content such as pre-vocational training and work experience in senior secondary schools that highlights health career options.

Repeated recommendations over a decade have been neglected to date, including from the ‘Review of Australian Government Health Workforce Programs’, ‘Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People’ and the earlier ‘gettin em n keepin em Report’ in which CATSINaM was involved as part of the Indigenous Nursing Education Working Group (Behrendt et al. 2012, CtGSC 2013, Indigenous Nursing Education Working Group 2002, Mason 2013). Recent tertiary education policy changes may adversely affect potential Aboriginal and Torres Strait Islander higher education nursing students in the absence of Aboriginal and Torres Strait Islander-specific adjustments to policy and funding (see Section 5.7 and Appendix 1).

Recommended VET pathway development options include:

- Broadening the focus from point of entry to pipelines and pathways - a more effective policy and institutional focus should broaden the current restricted focus on point of university entry to creating pipelines and pathways supporting Aboriginal and Torres Strait Islander students for the duration of their study (Pechenkina & Anderson 2011).

- Development of more Aboriginal and Torres Strait Islander student entry points at all levels of VET up to university, and in rural and regional areas in particular (Mason 2013: Recommendation 4.2).

- Increased Aboriginal and Torres Strait Islander participation in intermediate labour market programs such as bridging and enabling courses (Biddle et al. 2014).
Increased enrolled nursing and nursing assistant VET training places (Mason 2013: 145-146; Recommendations 5.1-5.3).

Expansion of the Aboriginal and Torres Strait Islander professional cadetship program, including for Year 12 graduates, para-professional and higher education students (Behrendt et al. 2012, Forrest 2014: Recommendations 20, 21, Indigenous Nursing Education Working Group 2002).

Improved VET credit transfer arrangements.


Specialised support as needed including mentoring, counselling and academic support (Anderson 2011, Behrendt et al. 2012, CATSINaM 2014d, Karmel et al. 2014, West 2013a and 2013b).


Government funding for Aboriginal and Torres Strait Islander Training Packages and Aboriginal and Torres Strait Islander national health organisations to drive progress, as part of a government coordinated approach to Aboriginal and Torres Strait Islander health training (Biddle et al. 2014; Mason 2013: 211-212, Recommendations 5.2, 5.3).

Adjustments to tertiary education funding and student loan HECS/HELP programs to encourage greater Aboriginal and Torres Strait Islander tertiary participation (see Section 5.7 and Appendix 1).

5.3 Improving higher education nursing completion rates: Issues and recommendations

5.3.1 Issues

CATSINaM members describe a range of difficulties they experienced in higher education:

“Financial disadvantage, not understanding university processes and requirements, family obligations, racism, not university ready...Cultural safety of the nursing and midwifery profession in general. Lack of value for the innate understanding of the socio-cultural issues that some Aboriginal and Torres Strait Islander nurses and midwives have that has significant benefit when caring for our mob.” (CATSINaM Members 2014; also see Fredericks 2006 on institutional racism in nursing)

Additional barriers include:

Labour market barriers: Factors such as geographical location, small labour markets and racial discrimination are clear disincentives to pursue further and higher education (Alford 2014, NACCHO 2014).

Gender combined with Aboriginality: The fact that nursing and midwifery are largely women’s business may partly account for the lack of concerted effort to improve Aboriginal and Torres Strait Islander nursing students’ opportunities and learning environments. Aboriginal and Torres Strait Islander women in general are doubly and even trebly disadvantaged, as Aboriginal and Torres Strait Islander peoples, as women within Aboriginal and Torres Strait Islander peoples and as women (Alford 2013, AWHNTC 2009 & 2010, Davis 2012, Fredericks 2010).

A relatively small footprint: The relatively small pool of Aboriginal and Torres Strait Islander Australians with adequate preparation for tertiary education and small Aboriginal and Torres Strait Islander footprint in the university sector may perpetuate the neglect of reforms needed to make the system more equitable.

Culture and curriculum reform: Cultural competency practices and standards vary considerably between individual universities. Lack of formal accredited cultural competencies and associated cultural safety in mainstream education and work environments is a system-wide problem in the health sector (AHMAC 2012: 3.08, 3.19, 3.20, 3.22, Alford 2014, CtGSC 2015: 3, Universities Australia 2014) and more generally (Karmel et al. 2014). This deficiency may be more severe in occupations and organisations in which the Aboriginal and Torres Strait Islander ‘footprint’ is relatively small, and perhaps also predominantly female, as it is in nursing and midwifery.

Aboriginal and Torres Strait Islander culture ‘blindness’ in nursing curricula, pedagogy and treatment of Aboriginal and Torres Strait Islander nursing students may be a significant barrier to Aboriginal and Torres Strait Islander nursing completions. Specific issues include exclusion of meaningful Aboriginal and Torres Strait Islander curriculum content, failure to acknowledge cultural and philosophical differences between Aboriginal and Torres Strait Islander and non-Indigenous people regarding health and health education, and failure to accommodate the cultural, educational and environmental needs of Aboriginal and Torres Strait Islander Australians and prospective students (West et al. 2010). This may suggest the need for more flexible course delivery methods, including some portion of distance learning, to enable Aboriginal and Torres Strait Islander students who travel long distances to study to remain close to their familial support system (Omeri & Ahern 1999).

Responsibilities for nursing standards in relation to cultural competency are fragmented. There are currently several, apparently uncoordinated and overlapping cultural competency projects to raise national standards in the health curriculum (including: AWMAC 2012: 3.08, ANMAC 2012-2014, Taylor et al. 2014, Universities Australia 2011 & 2014).
Lack of transparent targets: No discernible goal posts may perpetuate poor outcomes. There are many measures but no meaningful standardised national Aboriginal and Torres Strait Islander health student targets in Australian universities (Behrendt et al. 2012).

Capacity and willingness: Australian universities vary in their capacity and willingness to develop alternative entry pathways for Aboriginal and Torres Strait Islander students. Regional universities tend to be better in this respect than the group of eight leading universities (Pechenkina & Anderson 2011:1). Institutional differences combine with system-wide drivers to limit the number of Aboriginal and Torres Strait Islander entrants to university.

Equity and efficiency: The current system needs reform. It is not cost-effective. It is not producing first-class results and it suggests the continuation of systemic financial, academic, institutional and cultural barriers to recruiting and retaining Aboriginal and Torres Strait Islander students in nursing and other higher education degrees.

5.3.2 Recommendations

These include:

- Bridging and enabling courses (Behrendt et al. 2012).

- Targeted additional support for universities with higher proportions of Aboriginal and Torres Strait Islander students, including James Cook University, the University of Western Australia and University of Newcastle.

- Specialised academic support, including tutorial services, mentoring and appointment of an Aboriginal and Torres Strait Islander nurse academic in all schools of nursing, linked to Aboriginal and Torres Strait Islander education units (Behrendt et al. 2012; Indigenous Nurses Working Group 2002, West 2013).

- Financial and other resources support, including (more) Aboriginal and Torres Strait Islander-targeted accessible information about courses, nursing scholarships and bursaries, provision of virtual networks and other IT solutions to geographical and cultural barriers to access, culturally (and gender) safe accommodation, counselling. The need to ensure adequate public income support while studying is emphasised (Behrendt et al. 2012; Indigenous Nurses Working Group 2002) - also see Section 5.7.

- Culture and curriculum reform, as a unified approach to incorporating Aboriginal and Torres Strait Islander health competencies in the curriculum (and accreditation standards) could be facilitated by government and included as KPIs in an accounting and evaluation framework (Behrendt et al. 2012, Mason 2013: 17-18, Taylor et al. 2014, Universities Australia 2011 & 2014) - also see Sections 5.6 and 5.7. CATSINaM is addressing cultural competency, inclusion and cultural safety issues in education and employment (CATSINaM 2013b & 2014, Mohamed 2014) also see Behrendt et al. (2012) and Mason (2013).

- National targets and KPIs for enrolments and completions using a population parity standard are needed (Behrendt et al. 2012) - also see Section 5.6.
Partnerships with Aboriginal and Torres Strait Islander communities, tertiary providers and other stakeholders are recommended. Mutual capacity building may occur in partnerships but successful and respectful partnerships emphasise transfer of resources and equitable leadership for Aboriginal and Torres Strait Islander partners (AWHNTC 2009: 26-27, Burton 2012 in Hunt 2013, Pechenkina & Anderson 2011) - also see Section 5.8.

Leadership is critical. Government support for establishing a national ‘Leaders in Aboriginal and Torres Strait Islander Nursing and Midwifery Education Network’ (LINMEN) is a recommended short-term priority (Behrendt et al. 2012: recommendation 5.4, Mason 2013: recommendation 5.4). A LINMEN would liaise with the current Leaders in Aboriginal and Torres Strait Islander Medical Education (LIME) Network and with the Aboriginal and Torres Strait Islander Higher Education Advisory Council.

Reform implementation is required. Detailed recommendations from the ‘Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People’ (2012) are being overseen by the Aboriginal and Torres Strait Islander Higher Education Advisory Council (ATSIHEAC), a Government committee reporting through the Department of Education.

Policy and funding change is needed. A national Aboriginal and Torres Strait Islander nursing and midwifery advisory position is recommended (Mason 2013). Funding could be redirected to Aboriginal and Torres Strait Islander higher education health programs from the Rural Clinical Training and Support program and by extending the Aboriginal and Torres Strait Islander Chronic Disease Funding Package (Mason 2013: 212-215). Current policy and funding parameters and their lack of alignment are unlikely to promote better outcomes and may indeed achieve the reverse - also see Section 5.7 and Appendix 1.

5.4 Implementing accreditation standards

Accreditation standards are an important mechanism for assessing professional standards against specific competency standards and, if accreditation processes are reviewed regularly, enable continuous quality improvement. For nurses and midwives these standards are set by ANMAC (Australian Nursing and Midwifery Accreditation Council) and since 2010, by a single National Registration and Accreditation scheme (ANMAC 2014).

CATSINaM is represented on accreditation review boards. Midwifery and nurse practitioner accreditation standards include Aboriginal and Torres Strait Islander history, health, wellness and culture in teaching programs (Standards 4.6, 4.7); the enrolled nursing standards are currently under review. Affirmative action to support Aboriginal and Torres Strait Islander higher education enrolments and supports in recruitment is also included (Standards 6, 7; nurse accreditation standard 6 refers to “encouraged to enrol” rather than “affirmative action” [ANMAC 2012]). ANMAC supports credit transfer and recognition of prior learning consistent with the Australian Qualifications Framework (ANMAC 2013).

Despite these standards, systemic cultural competency flaws remain in health curricula and the health system. CATSINaM and the Australian College of Nursing recommend that government
introduce requirements that cultural safety training be part of the accreditation process for all health services, and that culturally safe work environments be provided to both staff and patients (ACN 2014: 5, 24, RACP 2012a). These standards should be included in a performance accounting and evaluation framework (see Section 5.6).

5.5 Workforce recruitment and retention

Increasing the size, productive and cultural capacity of the Aboriginal and Torres Strait Islander health workforce is fundamental to improving health and wellbeing (NATSIHP 2013) as also noted in the National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework 2011–2015 (AHMAC 2012: 145). A number of recruitment and retention issues stand in the way.

5.5.1 Recruitment issues

These issues include:

- Prerequisite requirements for developing nursing health workforce capacity, including: improving Aboriginal and Torres Strait Islander school students’ awareness of health career options, school completion rates, literacy and numeracy skills, and aspirations and engagement with education and training more broadly (see Sections 2.2.2, 2.2.4, 3.1 and 3.2).

- Tertiary education issues result in a limited supply of adequately tertiary trained Aboriginal and Torres Strait Islander health professionals (see Section 3.1).

- Geographical location and family separation combined with the disincentive effects of limited rural and remote-area labour markets act as barriers to pursue a career in nursing (Alford 2014, NACCHO 2014).

- Financial barriers.

5.5.2 Retention issues

These issues include:

- Lower health workforce retention rates as proportionately fewer Aboriginal and Torres Strait Islander health-qualified people continue to work in the health workforce compared with their non-Indigenous counterparts, an issue that needs further investigation (Carson 2012).

- System-wide barriers in training extend to workplaces, including: geographical and professional isolation, insufficient supervision and mentoring, lack of financial support, and lack of transport and funding to travel for education and professional development. The Nurses 2010 award includes up to 10 days ceremonial leave a year (AHMAC 2012: 3.22, Alford 2014, ANMF 2014: 18, AWHNTC 2009: 17, 25-27, AWHNTC 2010: 30-33, CATSINaM 2014b & d).

- Poor access to professional development opportunities for rural and regional nurses, although required by the National Registration and Accreditation Scheme to maintain
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- Workplace issues, including: racism (including within nursing), lower valuation compared with non-Indigenous health professionals, a lack of respect for cultural knowledge, and pervasive organisational and institutional cultural competency issues (AHMAC 2012: 3.08, 3.22, Alford 2014, AWHNTC 2009 & 2010, Carson 2012, CATSINaM 2014b, c & d, Trueman et al. 2011, Willis & Chong 2014) – also see Sections 2.2.6 and 2.2.7.

- Workplace stress, as Aboriginal primary health care services staff report being stressed by high demand amid stringent supply constraints (Alford 2014). Further investigation of workplace stress, burn out and staff turnover is needed. High rates of reported psychological distress and trauma in Aboriginal and Torres Strait Islander communities almost certainly affect Aboriginal and Torres Strait Islander nurses. The limited literature suggests that close proximity to the community, complex personal circumstances, grief and loss issues, and lack of culturally safe working environments are all factors that may affect Aboriginal and Torres Strait Islander nurses (Mitchell & Hussey 2006, Roche et al. 2013).

- Lack of positions, usually due to poor funding, leads to inflexible leave arrangements and/or workforce shortfalls (Alford 2014, ANMF 2014: 18).

- Financial and other resource barriers, such as insufficient further training and professional development opportunities, lack of support and lack of workplace flexibility is aggravated by lack of funding and back-up staff for those needing to take leave (AWHNTC 2009: 18, 26, 31, CATSINaM Membership reports 2014). Some of these extrinsic factors also affect overall retention in the health workforce in rural and remote areas (Campbell et al. 2012).

- Competition between Aboriginal and Torres Strait Islander and mainstream health organisations for health professional workers including nurses: competition is for a relatively small workforce pool, particularly in rural and remote areas. Nearly two-thirds of all ACCHS across Australia have staff vacancies, and more than a half are longer term vacancies (AHCSA 2014, AHMAC 2012: 3.22, NACCHO 2013).

- Wage disparities - the wage levels of Aboriginal and Torres Strait Islander health workers are generally lower on average, and in specific occupations such as nursing, Aboriginal and Torres Strait Islander wages are almost 10% lower on average (Carson 2012). Staff shortages are aggravated by the lack of wage parity between ACCHS and mainstream health organisations, particularly those in the public sector (AHCSA 2014, NACCHO 2013).

- Mid and late career barriers to re-entry, including burnout and registration processes for returning to career (CATSINaM 2014d).

5.5.3 Combined recruitment and retention issues

These work together in the following manner:

- Pathways and transitions - see Section 3.1, 5.2 and 5.3.
Funding restraints due to funding levels, funding insecurities, complex and fragmented funding sources, and short-term and pilot program funding in both education and employment (Alford 2014) - also see Section 5.7 and Appendix 1.

Policy deficits include the Australian Government’s current freeze on recruitment and employment (AHCSA 2014, NACCHO 2013), and the lack of a national accounting and monitoring framework or targets - also see Sections 5.6 and 5.7.

5.5.4 Remote area workforce and funding issues

These identified issues are aggravated in remote areas and compounded by access and funding issues that affect primary health care services. Many health services in remote Aboriginal and Torres Strait Islander communities are provided by nurses and Aboriginal Health Workers, whose services are largely not covered by Medicare or Pharmaceutical Benefits Scheme (PBS) subsidisation of GP consultations and prescribed medicines. This disadvantage is compounded by the greater health needs of the Aboriginal and Torres Strait Islander population, higher cost of delivering services and lack of economies of scale in remote areas (Thomas et al. 2014).

5.5.5 Recommendations for recruitment and retention

Three areas stand out for attention:

- Development of a national Aboriginal and Torres Strait Islander nursing workforce strategy: This would address training and employment issues in the context of the National Implementation Plan for the NATSIHP and the Commonwealth Indigenous Advancement Strategy, and should include:
  - Identified pathways and transition programs.
  - National coordination of the overall (nursing and health) training pipeline due to the split of government responsibilities and accountabilities and alignment required between the health and higher education sectors (HWA 2012-2014, Mason 2013).
  - Flexible, place-based agreements with Aboriginal and Torres Strait Islander communities and regions to improve Aboriginal and Torres Strait Islander school attainment, employment and other enabling services (Australian Government DPMC 2014).
  - Cultural safety support and cultural safety training for all health employees (AHMAC 2012: 169, CATSINaM 2014b).
  - Supervised clinical placements coordinated by training providers and linked with University Nursing and Rural Health faculties and ACCHS (Mason 2013: 147 & recommendations 4.7, 4.8) - these are a workforce development enabler and a performance benchmark in the National Partnership Agreement on health and workforce reform (HWA 2014: 9, 11).
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- Professional development support, including by expansion of Rural Health Continuing Education programs and CATSINaM funding to facilitate access to professional development (CATSINaM 2014b, Mason 2013: 12-15, 284).
- Incentives to nursing labour force re-entry, including scholarships (Mason 2013:12-15, 284).

Cross-cultural training in education and employment: Evidence of individual, organisational and institutional racism in and beyond the health system is well known and will not be repeated here (AHMAC 2012: 3.08, Alford 2014, Fredericks 2006, Omeri & Ahern 1999, West et al. 2010). Cross-cultural training in education and the workplace may be limited in redressing systemic biases. One recommendation is that cross-cultural training be accompanied by “anti-racism training” that addresses issues of “white race privilege” and marginalisation of Aboriginal and Torres Strait Islander people within the health system (Fredericks 2006).

Development of working partnerships: Effective partnerships are between equals and require transferring resources to assist the development of recruitment and retention programs such as mentoring, communication and marketing strategies to encourage Aboriginal and Torres Strait Islander people to work in health (CATSINaM 2013c, Mason 2013, West et al. 2013). Aboriginal and Torres Strait Islander nursing partnerships should include government, principal employers, Aboriginal and Torres Strait Islander national health organisations - including CATSINM and NACCHO, and training providers - including RTO members of ATSIHRTONN (Aboriginal and Torres Strait Islander Health Registered Training Organisation National Network).

5.6 Developing a monitoring and evaluation framework

5.6.1 Data inadequacies

There are several existing data inadequacies that need to be addressed:

- Access to health services: Current indicators do not account for access to health services (CtGSC 2015: 34).
- Incomplete identification of Aboriginal status: This limitation in administrative data sets, including the national census, results in understating the Aboriginal and Torres Strait Islander population, health and service needs. Population adjustments are made by the ABS and AIHW (AIHW Australia 2014: 299, AIHW Data 2013). The extent to which under-enumeration may influence health workforce records and research may be considerable (Deeble 2009, VACMS 2014). This issue requires further investigation.
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- **Geographical classification system:** The Australian Standard Geographical Classification for Remoteness Areas (ASGC – RA) scheme is used in government data sets including by the Department of Health and Ageing. It may be too blunt a tool for use in workforce planning, and should be reviewed and/or supplemented by alternative administrative data sets (Commonwealth of Australia 2012: Ch. 5, recommendation 8).

- **General health workforce data limits:** National health workforce data has limitations for workforce planning. There are concerns about the quality of midwifery data for use in workforce planning and projections. More development work is needed to understand regional distribution issues and primary health care nursing (HWA 2012 Vol. 1: 3, 6-9).

National biennial health reports on Australia’s health include data on total health practitioner employment but not Aboriginal and Torres Strait Islander health employment specifically. This is a surprising omission given its critical importance to accessing health services and to Aboriginal and Torres Strait Islander health outcomes (AIHW 2014: 338). Additionally, general health workforce planning and projections do not identify relatively small Aboriginal and Torres Strait Islander population and health workforce needs (see Section 4.5). Improved national data is required on the Aboriginal and Torres Strait Islander health workforce, recruitment and retention issues (AHMAC 2012: 3.22).

### 5.6.1 National accounting, monitoring and evaluation framework, targets and KPIs

Alignment between policy and funding is a priority. Both NATSIHP and the National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework 2011-2015 emphasise the need for accountability in planning, prioritising and target setting (NATSIHP 2013: 40-41; NATSIHWFSF; see also CtgSC 2015; Mason 2013, recommendation 5.1; Behrendt et al. 2012; RACP 2012a: 6):

“Targets can be an effective tool in the development and monitoring of health policy where they are developed in consultation with all relevant stakeholders and there is a shared commitment to their achievement. Targets need to be SMART: Specific, Measurable, Achievable, Realistic and Time-Bound.” (NATSIHP 2013: 41, also see CATSINaM 2014d: 26)

National KPIs in Aboriginal and Torres Strait Islander primary health care monitor progress in this part of the health system’s contribution to ‘Closing the Gap’ targets (AIHW KPI 2014). They should be extended to education, training, employment and progress in developing cultural competency in health and community service systems (NT Government 2014).

Transparent targets should be regularly reported and include:

- post-school transition programs for Aboriginal and Torres Strait Islander students (ACER 2014)
- training and employment outcomes
- specific population parity targets for VET, Registered Training Organisations (RTOs), university providers and employment
gaps in nursing enrolments and completions (Behrendt et al. 2012, Mason 2013: recommendation 5.1);
- KPIs for cultural safety in training, employment and accreditation processes
- milestones and time frames.

Recommendations for improved data collection and accessibility regarding the Aboriginal and Torres Strait Islander nursing and health professional workforce should be considered by the National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data (NAGATSIHID), and reported to the Australian Health Ministers’ Advisory Council (AHMAC) and Australian Government Department of Health heads, including those responsible for Aboriginal and Torres Strait Islander and Rural Health and Health Workforce Reform.

## 5.7 Government policy

### 5.7.1 The current overall approach

Government policies include National Partnership Agreements on Closing the Gap in Aboriginal and Torres Strait Islander Health Outcomes and Aboriginal and Torres Strait Islander Economic Participation (AHMAC 2012: 145, Carson 2012) and, since 1 July 2014, a Commonwealth Indigenous Advancement Strategy that replaced more than 150 individual Aboriginal and Torres Strait Islander programs and activities with five broad programs. This followed budget estimates and forecasts of reductions in per capita Aboriginal and Torres Strait Islander health expenditure from 2013-14 to 2017-18 (Alford 2014, Australian Government Budget Papers 2014-15, Australian Government DPMC 2014).

The potential negative impact of proposed Budget measures on Aboriginal and Torres Strait Islander health programs is substantial (CtGSC 2015: 27-29). Table 10 in Appendix III summarises the 2014-2015 Australian government health budget and forward estimates.

In May 2014 the Australian Government indicated that it would update the NATSIHP and develop an implementation plan outlining the Commonwealth’s coordinated efforts to improve Aboriginal and Torres Strait Islander health outcomes ([http://www.health.gov.au/natsihp](http://www.health.gov.au/natsihp)). This has not yet occurred.

Moreover, there do not appear to be coherent links between the ‘new’ Indigenous Advancement Strategy and ‘old’ Closing the Gap policies and strategies. These should be articulated and strengthened, on the basis of community consultation and engagement (CtGSC 2015: 25-26, Recommendation 4). Continuing to use existing policy and funding parameters regarding Aboriginal and Torres Strait Islander health professional workforce needs will hinder progress in ‘Closing the Gap’ health, education and employment outcomes. A rapidly increasing Aboriginal and Torres Strait Islander population with proportionately greater health needs requires Aboriginal and Torres Strait Islander-specific professional health workforce policies.
5.7.2 Higher education policy

In principle, the Australian Government is committed to enhancing higher education participation and outcomes for Aboriginal and Torres Strait Islander people consistent with ‘Closing the Gap’ initiatives. It has set an “aspirational target” for Aboriginal and Torres Strait Islander participation in higher education based on population measures (Australian Government 2013).

In practice, recent and proposed tertiary and higher education policy changes are likely to aggravate existing barriers to tertiary and higher education access and participation by disadvantaged Australians, including Aboriginal and Torres Strait Islander students (Anderson 2014) – also see Appendix 1. On a per student basis overall, government expenditure on higher education in Australia is below the international (OECD) average, with a downward trend in real expenditure and increasing reliance on private expenditure estimated in the next four years. Vocational and other education expenditure is estimated to decrease dramatically in real terms (ABC Drum 2014, Australian Government Budget 2014-2015: Table 7 & commentary).

These expected decreases are due to government policy changes including a shift to a fully deregulated and demand-driven system, reductions in government funding and Commonwealth subsidies for higher education student places, changes to the student loan HECS/HELP program, and a shift in the burden of course costs from government to students. There are also proposed changes to Aboriginal and Torres Strait Islander Away from Base (AFB) funding (Australian Government Budget Papers 2014-2015, Dow 2014).

The Aboriginal and Torres Strait Islander component of the Higher Education Participation and Partnerships Program (HEPPP) is based on a competitive grants application process. While a number of tertiary and higher education organisations are funded for the 2013-2015 period, overall funding is limited to $15.4 million annually, i.e. less than 0.2% of the annual Commonwealth higher education budget over the next three years. HEPPP funding appears to be uncoordinated and unevenly distributed across geographical areas and jurisdictions, with no apparent rationale for either the level, distribution or adequacy of funding (Australian Government Budget 2014, Australian Government Department of Education 2014).

In the absence of Aboriginal and Torres Strait Islander-specific adjustments to policy and funding, it is unlikely that proposed ‘compensatory’ scholarships for disadvantaged students will overcome systemic barriers to higher education participation among Aboriginal and Torres Strait Islander people.

Adjustments could include modification of the HECS/HELP scheme, extension to Aboriginal and Torres Strait Islander students of government HECS/HELP debt forgiveness initiatives and the HECS Reimbursement Scheme for doctors who work outside metropolitan areas, and redirecting funding from the Rural Clinical Training and Support (RCTS) program to promote Aboriginal and Torres Strait Islander participation in higher education health studies including nursing (Commonwealth of Australia 2012: Ch. 5, Mason 2013: recommendations 4.16, 5.5).
5.7.3 Tertiary training

Policy changes include estimated dramatic reductions in vocational and industry training (real) expenditure by 16.9% from 2013-14 to 2014-15, and by 4.3% from 2014-15 to 2017-18, along with deregulation of TAFE and College tuition fees from 2016 (Australian Government Budget 2014-15 Statement 6, Table 7 and VET commentary). Health workforce reports indicate inadequate and inconsistent funding allocations to Aboriginal Registered Training Organisations (Alford 2014, Mason 2013: 18).

The Aboriginal and Torres Strait Islander Health Registered Training Organisation National Network (ATSIHRTONN) is designed, with appropriate funding, to build the capacity of its member RTOs to deliver culturally appropriate education and training to the Aboriginal and Torres Strait Islander health workforce. Developing collaborations and partnerships between government, ATSIHRTONN, Aboriginal and Torres Strait Islander health and other health education/training organisations is recommended (ATSIHRTONN 2014). However, the ATSIHRTONN Secretariat was defunded in September 2014.

5.7.4 Funding requirements and models for addressing nursing shortfalls and creating parity

A basic principle of equity is that health expenditure should reflect relative needs for health services and should be proportionately higher for population groups with higher levels of need (AHMAC 2012: 3.22). Government expenditure on Aboriginal and Torres Strait Islander health, including nursing and midwifery, does not appear to be related to population size, distribution or health need (see Appendix III). This will aggravate predicted nursing shortfalls.

Policy and funding requirements for addressing nursing shortfalls and achieving employment policy targets based on population parity should account for population growth, distribution, health need, professional workforce development, and national Aboriginal and Torres Strait Islander organisation representation.

Relatively short-term competitive funding models provide insufficient certainty and support for health services and their professional workforce (RACP 2012a: 4). Aboriginal and Torres Strait Islander primary health care health funding in particular tends to be fragmented and uncoordinated (Alford 2014, Lowitja 2012, Martini, A. et al. 2011). Reliance on Medicare-based funding arrangements is less appropriate for Aboriginal and Torres Strait Islander nursing services. Suggested alternative Aboriginal and Torres Strait Islander health service funding models include block Commonwealth Grant funding and pooled government department funding with built-in appropriate governance and reporting standards (Lowitja Institute 2012, Moran et al. 2014).
5.8 Empowerment equals health

“Empowerment equals health” (Professor of Public Health Fran Baum cited in AWHNTC 2009: 23)

“It is peculiar... that as the most consulted and researched people in the country, we are the least listened to” (Aboriginal and Torres Strait Islander health workshop participant cited in Universities Australia 2011).

“In the construction of "Aboriginality" we have been objects. Objects to be manipulated and used to further the aspirations of other peoples” (Professor Mick Dodson)

Aboriginal and Torres Strait Islander health organisations report health policy fatigue from “numerous reports commissioned, all-of-government commitments and international covenants signed – truly a paradox of innovation without change” (NACCHO 2012). Many reports lack “readability and understandability” (ACER 2012: 53). Aboriginal and Torres Strait Islander women across Australia report:

“Nobody ever bothers...taking the time to come and talk with us...unless there is something in it for them...get the job done and get the report out...(when they come) they are scared of where they might have to sleep and yet we have these conditions all the time...We are so sick of waiting...People are dying around us” (AWHNTC 2009: 17 in Alford 2013).

The ‘Indigenous Advancement Strategy’ (IAS) was developed with minimal consultation or engagement with Aboriginal and Torres Strait Islander people and organisations, with the exception of the non-representative, government hand-picked Aboriginal and Torres Strait Islander Advisory Council. Combined with delaying assessment of IAS applications until March 2015, and an apparent disconnect between the IAS and ‘Close the Gap’ policies and programs, this has generated increasing frustration with current government Aboriginal and Torres Strait Islander policies and processes (CtGSC 2015: 25-26).

It would be timely and appropriate for government to recognise the representative voice of Aboriginal and Torres Strait Islander nurses and midwives, CATSINM, and provide it with adequate financial support to achieve its strategic directions in the areas of recruitment, retention and supporting members’ educational and workforce needs. It is worth noting that the Indigenous Advancement Strategy’s ‘Culture and Capability’ Program includes “(s)trengthening the capacity of Aboriginal and Torres Strait Islander organisations so that they are able to effectively deliver Government services to Aboriginal and Torres Strait Islander people and communities” (Australian Government DPMC 2014).

CATSINaM is strongly linked to several mainstream and Aboriginal and Torres Strait Islander organisations, including membership of the National Aboriginal Health Leadership Forum and National Close the Gap Steering Committee, the Australian Council of Deans of Nursing and Midwifery, ANMAC (Australian Nursing and Midwifery Advisory Council), the former Health Workforce Australia (HWA), and regional and national Aboriginal and Torres Strait Islander health and health research organisations including NACCHO.
These partnerships should, ideally, strengthen and add value to CATSINaM’s work. Unlike mainstream partner organisations, however, CATSINaM is a small organisation employing six people to discharge substantial responsibilities associated with driving its Strategic Directions, as well as providing ongoing services to members. Lack of financial and human resources constrains CATSINaM’s capacity to achieve key process and impact indicators, despite having the vision, initiative and willingness to pursue them.
Section 6: Economic benefits

There are multiple benefits to Aboriginal and Torres Strait Islander and all Australians from increasing Aboriginal and Torres Strait Islander people’s higher education participation and employment. These include direct benefits for individuals and communities, as well as broader economic and social benefits for all Australians (Australian Government 2013: 11). Achieving these economic benefits requires a coordinated combination of resource allocations, reallocations and targeted investments in key areas.

6.1 Directing government expenditure to higher level VET training

Aboriginal and Torres Strait Islander people are over-represented in the VET system (5.4%) on a population basis (3.0%), and concentrated in low-level Certificate levels. Investing in Aboriginal and Torres Strait Islander Training Packages in intermediate labour market program - such as bridging and enabling courses, in higher level VET nursing entry level courses and in Aboriginal and Torres Strait Islander national health organisations to drive progress is recommended as part of a government coordinated approach to Aboriginal and Torres Strait Islander health training.

6.2 Redirecting government expenditure from “reactive” services to health and education

The following is an example of redirecting government expenditure from public order and safety to tertiary education.

Example 1: Redirecting government expenditure

Government expenditure on public order and safety is more than five times higher on the Aboriginal and Torres Strait Islander compared with non-Indigenous population on a per capita basis, and 4.4 times higher than Aboriginal and Torres Strait Islander tertiary education expenditure per head (2012-13, ROGS 2014: Table 2).

95 additional nurse graduates were required in 2012 to create parity in graduation rates between Aboriginal and Torres Strait Islander and non-Indigenous students (see Table 3b). Based on Aboriginal and Torres Strait Islander tertiary education expenditure of $1,099 per head, total expenditure of $104,405 (2012 amount) would be required to achieve this target.

This expenditure would reduce the need for high levels of government “reactive” and “preventative” expenditure on social security, public order and safety services (Forrest 2014). The expenditure is modest, education gains are immediate and potential employment gains are substantial.
6.3 Low nursing completion rates drain the public purse

Redressing institutional and cultural barriers to higher education completion rates generates high individual and community economic gains, as well as additional government revenue. The following is an example of wasting government expenditure.

Example 2: Wasting government expenditure

Current higher education government expenditure on Aboriginal and Torres Strait Islander nursing is ‘wasted’ if many students do not graduate and enter the professional workforce. Of the commencing Aboriginal and Torres Strait Islander cohort of 304 students in 2010, 201 students did not graduate. This expenditure ‘waste’ of an estimated $220,899 declines to $117,593 if Aboriginal and Torres Strait Islander non-completion rates are on par with those of non-Indigenous nursing students. Government budgets benefit from expenditure savings and additional savings from reduced reactive expenditure on social security payments and potential additional revenue (employment taxes).

6.4 Success breeds success - role model effects

Increasing completion rates provide positive signals to Aboriginal and Torres Strait Islander young people to become engaged in study and/or work. Multi-generational unemployment and associated risky behaviours impact on Aboriginal and Torres Strait Islander young people’s development and identity. Increasing professional employment and economic independence enlarges the pool of role models for young Aboriginal and Torres Strait Islander people.

6.5 Building Aboriginal and Torres Strait Islander nursing health workforce capacity is a cost-effective approach to ‘Closing the Gap’

Improvements would occur in cross-sector indicators in health, employment and economic participation. The following is an example of how additional nursing and midwifery employment can be created to meet identified targets.

Example 3: Creating additional nursing and midwifery employment to meet parity targets

To meet a population parity target of 3% of all nursing and midwifery employment requires employment of an additional 6,516 Aboriginal and Torres Strait Islander nurses and midwives (see Table 8). Assuming a three-year phase in period by employing 2,172 more Aboriginal and Torres Strait Islander nurses and midwives annually at an estimated annual average wage of $66,000, government expenditure per head of Aboriginal and Torres Strait Islander population would be $205 annually using the RN Year 4 minimum wage NSW (ANWF 2014: 27, Australian Government Budget Papers 2014-15, Forrest 2014: 18, 21, ROGS 2014: Table 7).
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Putting this into perspective, $205 per Aboriginal and Torres Strait Islander head expenditure on an additional 2,172 Aboriginal and Torres Strait Islander nurses represents, on an annual per capita basis is equivalent to:

- 0.5% of total government direct expenditure on Aboriginal and Torres Strait Islander people
- 2.3% of Aboriginal and Torres Strait Islander health expenditure
- 3.2% of Aboriginal and Torres Strait Islander social security services expenditure (ANMF 2014: 27; ROGS 2014: Tables 2, 7)

The contribution to improved employment, economic participation and health outcomes would be substantial.

6.6 Multiplier effects of a targeted impact investment: Closing parity gaps in employment, health and education

“(T)he economic benefit of ending the (‘Closing the Gap’) disparity will compound to billions of dollars and eventually, through economic multipliers, to tens of billions dollars each year” (Forest 2014: 6).

The positive multiplier effects of a fiscal stimulus on national output, employment and income are well known in economic and policy circles (Burress 1989, Gretton 2013, The Economist 2009). However, macroeconomic growth does not necessarily ‘trickle down’ to disadvantaged communities (Gregory & Hunter in Burkett 2012). Intervention in the form of a targeted impact investment is needed to achieve 3% Aboriginal and Torres Strait Islander employment in nursing and midwifery.

Multiplier analysis provides a guide to achieving this, by assessing the impact of additional employment of Aboriginal and Torres Strait Islander nurses and midwives on overall Aboriginal and Torres Strait Islander employment (ABS 2009). Meeting a government aim and population parity target of 3% employment for Aboriginal and Torres Strait Islander nurses and midwives requires 6,516 additional nurses and midwives (see Table 8). Using a three-year phasing-in approach would require 2,172 additional Aboriginal and Torres Strait Islander nurses and midwives in the first year.

Results of the multiplier analysis of this initial annual investment are presented in Table 10 in Appendix II, along with technical notes. The analysis is based on a conservative multiplier effect of 1.6 on employment and 1.6 on income from the initial expenditure (initial effect). That is, for every additional job created or dollar invested, an additional 0.6 jobs and 0.6 more income is generated (secondary effect). The time frame for short-run impacts may be less than two years and longer for final impacts to flow through. The time frame will be shorter in smaller regions.
Example 4: Multiplier effects of closing the parity gap in Aboriginal and Torres Strait Islander nursing and midwifery employment

An additional 2,172 Australian Aboriginal and Torres Strait Islander nurses and midwives would reduce national Aboriginal and Torres Strait Islander unemployment by 1.1% (initial effect), and eliminate unemployment over time due to secondary effects assuming employment increases are distributed in areas of high unemployment.

Secondary effects would increase Aboriginal and Torres Strait Islander nursing and midwifery employment to 7,934 people as a result of the 1.6 multiplier effect. Additions to employment after the initial effect (Stage 2) would depend on government rather than market decisions.

Increasing the proportion of Aboriginal and Torres Strait Islander nurses and midwives in the current workforce would largely close the employment parity gap, as well as contribute to the Australian Government’s stated aim of achieving a 3% target in the public service.

Income effects would be equally substantial. Regional and remote area benefits would be magnified in communities without established labour markets.

The multiplier effects of investing in the Aboriginal and Torres Strait Islander health professional workforce would spread through communities and across sectors, particularly if this investment takes place within an appropriate policy implementation framework such as the NATSIHP.

It is important to note that multiplier analysis is limited to quantifiable economic gains. It does not include equity or externality type benefits that are additional to direct market benefits. These include substantial community benefits.

6.7 Resource boom and resource curse effects

The downside of the long-running resource boom has been the resource curse, the negative impact on Aboriginal and Torres Strait Islander people and communities not directly engaged in mining arising from high housing, food and service prices (Bankwest 2014; Hunter 2013; Langton 2012). Waning of the Australian resource boom may lead to significant income and employment losses for those directly involved in mining in many Aboriginal and Torres Strait Islander communities. Investments in the health workforce would compensate for this and enable the regeneration of several rural and remote communities.

6.8 Improved government budgets

The scale of strengthening government budgets arising from greater Aboriginal and Torres Strait Islander employment, productivity and increasing life expectancy over a twenty-year time period is estimated as:

- $11.9 billion net increase in government revenue (mainly tax payments from increased employment)
- $4.7 billion less government expenditure on social security and health
savings from expenditure on justice - decrease of 89%, social security - decrease of 54%, and health - decrease of 33% (Deloitte Access Economics 2014).

6.9 Economy-wide benefits

Targeted government investment to increase capacity in the Aboriginal and Torres Strait Islander nursing and midwifery workforce is cost-effective. It would enable population parity in Aboriginal and Torres Strait Islander nursing and midwifery employment and contribute to government policy aims, as well as generate broader national economic benefits due to the multiplier effects of the initial investment.

Deloitte Access Economics (2014) estimates that achieving parity in employment and health outcomes would increase GDP/national income over a twenty-year period by 1.2% higher in real terms — equivalent to around $24 billion.

6.10 Political choices and promoting parity

A focus on boosting the Aboriginal and Torres Strait Islander nursing and midwifery workforce contributes to multiple ‘Closing the Gap’ targets. Implementing higher education and workforce policy reforms involves a long lead time. Therefore, political decisions regarding promoting parity are needed in the short-term. Strategies aimed at achieving ‘Closing the Gap’ in any one area will not work in isolation (Deloitte 2014, DSS 2012, ROGS 2013: 2.11).

Investing in Australia’s Aboriginal and Torres Strait Islander nurses and midwives is not merely good health policy, but a cost-effective multi-sector strategy that would generate a range of local, regional and national economic benefits.
Appendices

Appendix I: Summary of the proposed higher education reforms - funding, student loans and debt 2015-2016

Higher education reforms are driven by a shift to a demand-driven system introduced by the Gillard Government and deregulation of the provision of places. Existing arrangements will remain for current students until they finish study, or until 31 December 2020 (whichever comes first). Deregulated fee provisions commence in 2016, but will apply to students accepting a place after 14 May 2014.

Student fees are expected to increase substantially and student debt to double (Knott et al. 2014). Funding changes include reduced Commonwealth Grants Scheme baseline funding on a per capita real basis and a 20% reduction in Commonwealth-supported places to “rebalance student and Commonwealth contributions towards a new student’s course fees” by shifting the costs to students from January 2016, and to higher education providers who “will be required to direct 20 per cent of additional revenue from increases in new student contributions to a scholarship scheme which will support access for disadvantaged students” (Australian Government Budget Papers 2014-15: Statements 1, 7).

Universities may be impelled to expect students to meet the funding shortfall in courses such as nursing, which previously has received approximately 70% of course costs from the Government contribution (Dow 2014).

Reforms are expected to increase fees for most university degrees, although students will still not have to pay back the government until they earn $50,000 or more. The 2014-15 budget measures relating to HELP will increase the cost of deferring a loan. Repayment will be set at 2% of income up to the current threshold, which is estimated to be $56,264 for the 2016–17 year. Increasing the indexation rate of student loans will also apply from 2016.

HELP debt is expected to increase substantially, despite the reduced income threshold repayment. Estimates of the average number of years to repay debt have increased from 8.6 years in 2013–14 to 9.8 years in 2017–18 (Australian Government, Portfolio budget statements 2014–15: budget related paper no. 1.5: Education portfolio: 75).

The shift of HECS/HELP loans from interest-free to interest-bearing will hurt those who earn less income after completing their degree because the amount of interest owed will compound. Increasing debt will deter some students from undertaking a degree and override the incentive of higher graduate salaries that have seen students prepared to forgo income and take on debt in the HECS-HELP scheme (for analysis of the returns to graduates see Norton, Graduate winners: Assessing the public and private benefits of higher education, 2012, Grattan Institute, Melbourne.)
Appendix II: Multiplier effects of targeted impact investment - closing parity gaps in Aboriginal and Torres Strait Islander employment

The positive multiplier effects of a fiscal stimulus on national output, employment and income are well known in economic and policy circles (Burress 1989, Gretton 2013, The Economist 2009). However, macroeconomic growth does not necessarily ‘trickle down’ to disadvantaged communities. Intervention in the form of targeted impact investments is required.

Multiplier analysis provides a guide to the broader impact of additional employment of Aboriginal and Torres Strait Islander nurses and midwives on Aboriginal and Torres Strait Islander employment. It can be applied to any industry or region although is less reliable for small areas. The method has several limitations, owing to its assumptions of no supply or budget constraints and fixed prices (ABS 2013, 2009; The Economist 2009). Economic benefits of the multiplier effects of additional investment in employment and workforce capacity building will be limited if infrastructure needs are not meet; that is, supply-side constraints may exist (Gretton 2013: 6).

Australian research indicates that increased expenditure on health, education and public infrastructure is particularly valuable in generating short-term benefits as well as longer term benefits, including increased income and productivity (North Australia Research Group 2010, Stoeckl et al. 2007). A 1.6 employment and income multiplier is a reasonable, low end of the range of health multipliers. Typical employment multipliers are 1.9 on average. U.S. Obama administration economists assume a multiplier of 1.6 for government purchases (The Economist 2009; Burress 1989). Other estimated multipliers include 4.75 for public investment in regional Australia and 1.9 for Australian tourism (Gretton 2013: 7-8).

To illustrate these multiplier effects, assume that government adopts a three-year staged approach to meeting a population parity target of 3% in nursing and midwifery employment. This would require 6,516 additional Aboriginal and Torres Strait Islander nurses and midwives, or 2,172 annually over three years (see Table 8). An estimated employment multiplier of 1.6 used in Table 9 estimates the multiplier effect of the first-year investment. That is, for every additional job created or dollar invested (initial effect), an additional 0.6 jobs and 0.6 more income are generated (secondary effect).

Table 9 indicates the initial effect of employing 2,172 additional Aboriginal and Torres Strait Islander nurses and midwives (Row 2), the secondary effect (Row 3) of multiplier effects on national Aboriginal and Torres Strait Islander un/employment and nursing and midwifery employment (and income), and the resulting change in national Aboriginal and Torres Strait Islander un/employment (Row 4) compared with current un/employment (Row 1).

Table 9 indicates the cost-effectiveness of this first-year investment by government, in enabling close to population parity in Aboriginal and Torres Strait Islander nursing and midwifery employment, as well as generating broader national employment benefits due to the multiplier effects of the initial investment.
The time frame for short-run impacts may be less than two years and longer for final impacts to flow through the region. The time frame will be shorter in smaller regions and labour markets. The final, longer term impact (induced demand) will be greater again owing to the cumulative effects of additional employment and income (Alford 2014; Stoeckl et al. 2007; Doeksen & Schott 2003).

Table 9 does not include equity or externality type benefits that are additional to direct market benefits. These include substantial community benefits.

Table 9: Multiplier effects of closing the parity gap in Aboriginal and Torres Strait Islander nursing and midwifery employment

<table>
<thead>
<tr>
<th>Measure</th>
<th>National Aboriginal and Torres Strait Islander employment</th>
<th>National Aboriginal and Torres Strait Islander unemployment</th>
<th>National Aboriginal and Torres Strait Islander unemployment</th>
<th>Aboriginal and Torres Strait Islander nurses &amp; midwives employment (i)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current employment/unemployment</td>
<td>173,800</td>
<td>33,800</td>
<td>16.3</td>
<td>2,787</td>
</tr>
<tr>
<td>Initial effect of additional 2,172 nurses and midwives</td>
<td>175,972</td>
<td>31,628</td>
<td>15.2</td>
<td>4,959</td>
</tr>
<tr>
<td>Secondary effect (x 1.6) (ii)</td>
<td>281,555</td>
<td>0</td>
<td>0</td>
<td>7,934</td>
</tr>
<tr>
<td>Final effect (change from 1 to 3%)</td>
<td>↑ 62%</td>
<td>Zero unemployment</td>
<td>Zero unemployment</td>
<td>↑ 185%</td>
</tr>
</tbody>
</table>


Notes

(i) National Aboriginal and Torres Strait Islander employment data is for 2011. Nursing data is for 2013. Using 2011 data (2,246 NaM) yields similar results.

(ii) Additions to employment after the initial effect (stage 2) depend on government rather than market decisions.
Appendix III: Australian government health budget 2014-2015, Aboriginal and Torres Strait Islander health expenditure estimates and forecasts 2013-14 to 2017-18

Lack of progress to date in Aboriginal and Torres Strait Islander wellbeing indicators including health is indicated in the ‘Overcoming Aboriginal and Torres Strait Islander Disadvantage’ report (PC 2014). Future progress is unlikely in view of Commonwealth budget forecasted reductions in Aboriginal and Torres Strait Islander health expenditure on a per capita basis and in proportion to total health expenditure. Table 10 represents projected Aboriginal and Torres Strait Islander and total health expenditure for the four years from 2013-14 to 2017-19.

Table 10 indicates that Commonwealth health expenditure for the total population will increase more than projected Aboriginal and Torres Strait Islander health expenditure. The Aboriginal and Torres Strait Islander-specific proportion of health expenditure is forecast to fall during the next four years by 0.01% annually and on a per capita basis by 1.2% annually between 2013-14 and 2017-18.

To illustrate the magnitude of these proposed budget cuts, assuming that the proportion of government health expenditure allocated to Aboriginal and Torres Strait Islander health remains stable over the four years from 2013-14, then an extra $99 million would be required in 2014-15, $97 million in 2015-16, $72 million in 2016-17 and $20 million in 2017-2018. In all, an additional $288 million should be expended between 2013-14 and 2017-18, just to retain the 2013-14 status quo in Commonwealth expenditure on Aboriginal and Torres Strait Islander health, which is already low.

Government expenditure projections for Aboriginal and Torres Strait Islander health do not appear to be based on either population size and growth, or health need. Proposed budget cuts to Aboriginal and Torres Strait Islander health pose a real danger that any health gains in recent years will be reversed.
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Table 10: Australian Government health expenditure and forward estimates, 2013-2014 to 2017-18

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</tr>
</thead>
<tbody>
<tr>
<td>Total population (no.)</td>
<td>23,544,943</td>
<td>23,966,394</td>
<td>24,395,392</td>
<td>24,832,070</td>
<td>25,152,407</td>
<td>↑ 1.7%</td>
</tr>
<tr>
<td>Aboriginal and Torres Strait Islander population (no.)</td>
<td>715,073</td>
<td>730,805</td>
<td>746,883</td>
<td>763,314</td>
<td>772,976</td>
<td>↑ 2.0%</td>
</tr>
<tr>
<td>Total Commonwealth health expenditure ($m)</td>
<td>$64,511</td>
<td>$66,892</td>
<td>$68,203</td>
<td>$71,797</td>
<td>$74,856</td>
<td>↑ 4.0%</td>
</tr>
<tr>
<td>Aboriginal and Torres Strait Islander health expenditure ($m)</td>
<td>$800</td>
<td>$730</td>
<td>$749</td>
<td>$818</td>
<td>$908</td>
<td>↑ 3.4%</td>
</tr>
<tr>
<td>Aboriginal and Torres Strait Islander proportion of total expenditure (%)</td>
<td>1.24%</td>
<td>1.09%</td>
<td>1.10%</td>
<td>1.14%</td>
<td>1.21%</td>
<td>↓ 0.01%</td>
</tr>
<tr>
<td>Aboriginal and Torres Strait Islander health expenditure per person ($)</td>
<td>$894</td>
<td>$1,001</td>
<td>$997</td>
<td>$933</td>
<td>$851</td>
<td>↓ 1.2%</td>
</tr>
</tbody>
</table>

Sources: Australian Government Budget Papers 2014. 2014-15: Statement 6 Table 8; ABS 2014 Aboriginal and Torres Strait Islander and total population estimates.

Notes: (i) Aboriginal and Torres Strait Islander health expenditure is expected to decrease by 10.7% in real terms from 2013-14 to 2014-15, “largely due to efficiencies in Aboriginal and Torres Strait Islander health programme funding” (Budget 2014-15 Statement 6).
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## Appendix IV: Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>ACCHS</td>
<td>Aboriginal Community Controlled Health Services</td>
</tr>
<tr>
<td>AHMAC</td>
<td>Australian Health Ministers’ Advisory Council</td>
</tr>
<tr>
<td>AHW</td>
<td>Aboriginal Health Worker</td>
</tr>
<tr>
<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
</tr>
<tr>
<td>ANMAC</td>
<td>Australian Nursing and Midwifery Advisory Council</td>
</tr>
<tr>
<td>ATSIHRTONN</td>
<td>Aboriginal and Torres Strait Islander Health Registered Training Organisation National Network</td>
</tr>
<tr>
<td>CATSINaM</td>
<td>Congress of Aboriginal and Torres Strait Islander Nurses and Midwives</td>
</tr>
<tr>
<td>COAG</td>
<td>Council of Australian Governments</td>
</tr>
<tr>
<td>CtG</td>
<td>Close the Gap (CtGSC Close the Gap Steering Committee)</td>
</tr>
<tr>
<td>EN</td>
<td>Enrolled nurses</td>
</tr>
<tr>
<td>HECS/HELP</td>
<td>Higher Education Contribution Scheme/Higher Education Loan Programme</td>
</tr>
<tr>
<td>HWA</td>
<td>Health Workforce Australia</td>
</tr>
<tr>
<td>IAS</td>
<td>Aboriginal and Torres Strait Islander Advancement Strategy</td>
</tr>
<tr>
<td>NACCHO</td>
<td>National Aboriginal Community Controlled Health Organisation</td>
</tr>
<tr>
<td>NATSIHP</td>
<td>National Aboriginal and Torres Strait Islander Health Plan</td>
</tr>
<tr>
<td>NATSIHPF</td>
<td>Aboriginal and Torres Strait Islander Health Performance Framework</td>
</tr>
<tr>
<td>NATSIHWSF</td>
<td>National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework</td>
</tr>
<tr>
<td>OID CtG</td>
<td>Overcoming Aboriginal and Torres Strait Islander Disadvantage Closing the Gap</td>
</tr>
<tr>
<td>RN</td>
<td>Registered nurses</td>
</tr>
<tr>
<td>ROGS</td>
<td>Report on Government Services</td>
</tr>
<tr>
<td>RTO</td>
<td>Registered Training Organisation</td>
</tr>
<tr>
<td>VET</td>
<td>Vocational education and training</td>
</tr>
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</table>
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