

Health, Development & Well-being in Far Western NSW

Our Children & Youth



Suggested citation:

Ierace J, Alperstein G, Kennedy C and Dyer C. *Health, development and well-being in far western NSW. Our children and youth*. Maari Ma Health Aboriginal Corporation, December 2014.

Cover artwork by Guy “Smiley” Crawford.

© Maari Ma Health Aboriginal Corporation. It may be produced in whole or part for study or training purposes subject to the inclusion of an acknowledgment of the source and no commercial usage or sale.

Requests for further information regarding all or part of this document should be directed to:

Maari Ma Health Aboriginal Corporation
PO Box 339 BROKEN HILL NSW 2880
T: (08) 8082 9888
F: (08) 8082 9889
W: www.maarima.com.au

HEALTH, DEVELOPMENT AND WELL-BEING IN FAR WESTERN NSW

OUR CHILDREN AND YOUTH

Foreword

Maari Ma Health Aboriginal Corporation has undertaken to publish a comprehensive set of data on the health, development and well-being of Aboriginal children in far western New South Wales (NSW) every 5 years.

This is the second publication of a comprehensive profile of Aboriginal children and young people in the Far West. We first published in 2009. The publication was based on key indicators of child health, development and well-being collected nationally and published by the Australian Institute of Health and Welfare (AIHW).

The first publication focussed predominantly on the antenatal to school entry period, since it followed the development of a 'Strategic Framework to Improve Child Development and Well-being for Aboriginal Children in the Far West' with a particular emphasis on the health and well-being of children from conception to age 8 years.

Since then the strategic framework has been updated to include school-aged children and published recently in 2012 (Strategic Framework Document. Improving development and well-being for Aboriginal children and young people in the Far West). Consequently, this latest set of data includes indicators from conception to school completion and in some instances up to age 24 years (in accordance with the WHO definition of youth).

Along with an updated 'Closing the Gap' table, this comprehensive set of data encompassing health, education and social indicators will continue to foster collaborative initiatives to improve the health, development and well-being of Aboriginal children and young people in the Far West, and allow on-going comprehensive monitoring to assess the efficacy of our services and programs.

Important note:

The 'Strategic Framework Document' to improve development and well-being for Aboriginal children and young people in the Far West was revised and re-released in 2012. Data presented in this document are, where possible, based on children and young people aged birth to 24 years. Age groups are often determined by the data sources we accessed, and not all sources report their data by the same groupings. Therefore the groupings we have used are not always consistent. Furthermore, with data where the annual numbers of cases are small, large fluctuations in rates can occur. This should be considered when interpreting the results.

Data presented here have been sourced from NSW Ministry of Health, NSW Department of Education and Communities, NSW Department of Family and Community Services, NSW Bureau of Crime Statistics and Research, the Australian Institute of Health and Welfare and the Australian Bureau of Statistics.

Since the last profile NSW health jurisdictional boundaries have changed. Previously the Greater Western Area Health Service (GWAHS) covered a geographical region from Bathurst in the east to the Queensland, Victorian and South Australian borders. A smaller area, the Far West Local Health District (FWLHD) was implemented in 2011, a geographical region which is exactly the same as Maari Ma's boundaries. Due to its smaller size and smaller population, NSW Health often combine data for the FWLHD and the adjacent Western NSW Local Health District. This larger geographical region (FW+Western LHDs) is in fact the same as the former GWAHS. For simplicity, in this profile, we have called this larger geographical region 'far western NSW'.

Contents

Part One:	Executive summary	1
	Closing the gap	3
	Availability of key indicators.....	5
Part Two:	Where do our children live?	7
	The region's geography	9
	The region's population	11
	Socio-economic status.....	12
	Income	14
	Employment.....	16
	<i>Youth employment</i>	18
	Government benefits.....	19
	Housing overcrowding	20
	Education.....	23
	<i>Enrolled in an educational institution</i>	23
	<i>Year of school completed</i>	24
	<i>Educational qualifications</i>	25
	The region's children.....	26
Part Three:	How healthy are our children?	29
	Mortality	31
	<i>Perinatal mortality</i>	31
	<i>Infant mortality</i>	33
	Chronic conditions.....	35
	<i>Diabetes</i>	35
	<i>Cancer</i>	35
	<i>Ear infections</i>	36
	<i>Respiratory illness</i>	38
	Disability.....	41
	Mental health	43
Part Four:	How well are we promoting healthy child development?.....	45
	Breastfeeding	47
	Dental health	49
	Physical activity	51
Part Five:	How well are our children learning and developing?.....	53
	Early learning.....	55
	<i>Read to daily</i>	55
	Attending early childhood education programs	56
	School participation	58
	<i>Enrolment in Year 12</i>	58
	<i>Attendance K-12</i>	59

	<i>Retention Year 10-12</i>	60
	Transition to primary school	62
	<i>Australian Early Development Census</i>	62
	<i>Best Start</i>	67
	Literacy and numeracy.....	68
Part Six:	What factors can affect children adversely?	71
	During the antenatal period	73
	<i>First antenatal visit</i>	73
	<i>Factors that influence pregnancy and birth</i>	74
	<i>Fertility rate</i>	77
	Overweight and obesity	79
	Environmental tobacco smoke	80
	Substance use.....	81
Part Seven:	What kind of families and communities do our children live in?.....	83
	Family economic situation	85
	<i>Parental Education</i>	85
	<i>Parental employment</i>	86
	<i>Housing stability</i>	87
	Children in non-parental care	89
	Parental health and disability	91
	Social capital	96
	<i>Engagement in society</i>	96
Part Eight:	How safe and secure are our children?	99
	Injuries	101
	<i>Suicide</i>	102
	School relationships and bullying	104
	Child abuse and neglect	105
	Homelessness	109
	Children and crime	110
Part Nine:	How well is the system performing?	113
	Congenital anomalies	115
	Neonatal hearing screening.....	116
	Childhood immunisation	117
	Quality childcare	120
Part Ten:	Conclusion	121
	Conclusion	123
Part Eleven:	Appendices	125
	References	127
	Abbreviations.....	129
	Data Sources.....	130
	Glossary.....	132

Part One:

Executive summary

A picture of our children provides the latest information on the health and well-being of far western NSW children and young people aged 0-24 years. Many are faring well but there is scope for further improvement.

Closing the gap

We have been following a few indicators over time to monitor how successful we are at closing the gap between outcomes for Aboriginal children in the Maari Ma Region and NSW as a whole.

The desired outcome is for 'The Gap' (in the table on the following page) to be equal to or less than 1 indicating that the result for the Aboriginal population in the Maari Ma region is exactly the same as, or better than the NSW population as a whole. For some indicators data can be shown over three different time periods (Period 1, 2 and 3). This enables us to show (when available) where improvements have been made in 'closing the gap'.

If the figure in 'The Gap' column is equal to or less than 1 it indicates that the Aboriginal population in the Maari Ma region is doing better than NSW population as a whole. A result in 'The Gap' column that is higher than 1 indicates that the figure for the Aboriginal population is worse than the NSW population as a whole. For example, the proportion of Aboriginal children in out-of-home care is 6.62 times higher than the proportion of NSW children.

The final column of the table on the following page indicates when the 'gap has been closed'. This means that the reported results for Aboriginal people in the Maari Ma region in period 3 are the same as, or better than, the results for NSW as a whole. For example the gap has been closed for Aboriginal children in the Maari Ma region that are fully immunised at 4 years of age as the gap for this indicator is 0.97 and has been 'closed' since 2009.

However, due to the occurrence of small numbers for certain indicators, the gap ratio may fluctuate significantly between measurement periods. For example, the gap ratio for perinatal mortality was less than 1 in the 2009 profile, and is just over 2 in the current profile, despite a very small increase in the number of deaths (less than 5 to 6 deaths). This must be taken into consideration when interpreting these data.

For other indicators the size of the gap has narrowed. Some examples of this are:

- Children as victims of crime
- Smoking in pregnancy
- Average number of decayed, missing and filled baby teeth and
- Average number of decayed, missing and filled permanent teeth.

Closing the Gap, a comparison of Maari Ma region (MM-R) Aboriginal results with NSW total results

	Period 1	Period 2 (2009 profile)		Period 3 (this profile)			Gap closed
	The Gap	MM-R (Aboriginal)	NSW (Total)	The Gap	MM-R (Aboriginal)	NSW (Total)	
Health indicators							
Smoking in pregnancy (2003-2007, 2008-2012)	4.06	78%	19%	4.11	66%	12%	5.50
Perinatal mortality [per 1,000 births] (1997-2001, 2002-2006, 2007-2011) ¹	1.77	6.3	8.9	0.71	18.0	8.6	2.09
Infant mortality [per 1,000 live births] (1997-2001, 2002-2006, 2007-2011) ¹	9.04	13.6	4.6	2.96	5.2	4.0	1.30
Low birth weight (2003-2007, 2007-2011)	-	12%	6%	2.00	13%	6%	2.16
Breastfeeding (2006-2007, 2007-2011)	-	70%	79%	1.12	71%	87%	1.22
Immunisation < 12 months ² (December 2008, 2014)	-	93%	91%	0.98	83%	90%	1.16
Immunisation 4 years ² (December 2008, 2014)	-	90%	87%	0.97	93%	92%	0.97 ✓
Average number of decayed, missing and filled baby teeth (2007, 2011)	-	4.3 ³	0.9 ⁴	4.78	4.7 ³	1.5 ⁴	3.04
Average number of decayed, missing and filled permanent teeth (2007, 2011)	-	1.7 ³	0.5 ⁴	3.40	1.13	0.74	1.54
Education indicators							
Year 3 NAPLAN results – above minimum standard (2007, 2013)	-	44%	90%	2.01	50%	89%	1.78
Year 7-10 completion rate ⁵ (2002-2004, 2005-2007, 2008-2010)	1.39	77%	95%	1.23	74%	96%	1.30
Social indicators							
Children in non-parental care [per 1,000 children] (2008, 2013)	-	78.4	10.0	7.84	78.8	11.9	6.62
Children at risk of or being harmed [per 1,000 children] (2007/08, 2012/13)	-	106.8	9.4	11.36	109.9	10.9	10.08
Children as victims of crime ⁶ [per 1,000 children under 18] (2003-2008, 2009-2013)	-	72.2	13.8	5.23	23.8	7.0	3.40

¹ Due to the small number of perinatal and infant deaths in far western NSW these results should be interpreted with caution

² Using Australian Childhood Immunisation Register coverage rates, comparing GWAHS/Maari Ma region total population with NSW population

³ Average of the three towns participating in the 2007/2011 School Kids Health Check

⁴ NSW Non-Indigenous result supplied by the Australian Research Centre for Population Oral Health

⁵ Of students who commenced school in Year 7, the percentage that are still attending school in Year 10

⁶ Victims of crime who are aged under 18 years

Availability of key indicators

The AIHW describes many of the indicators in this report as 'key indicators' of child and youth health, development and well-being. Data for many of the indicators are not available locally, nor is Indigenous status regularly available. The following table shows where the gaps in data are and where consideration should be given to developing local data collections.

Data availability of key indicators of child health, development and well-being

		Location of reported data	Local data collection currently in place
Health			
Mortality	Perinatal mortality	LGA	✓
	Infant mortality	LGA	✓
Morbidity	Ear infections	Community	✓
	Respiratory infections	Community	✓
Disability		LGA	✓
Mental health		State	?
Breastfeeding	At discharge	LGA	✓
Dental health		Maari Ma communities	✓
Physical activity		LHD	✓
During the antenatal period	1st antenatal visit	LGA	✓
	Births to teenage mothers	LGA	✓
	Low birth weight	LGA	✓
	Prematurity	LGA	✓
	Smoking during pregnancy	LGA	✓
	Alcohol use during pregnancy	Maari Ma communities	✓
Fertility rate		LGA	✓
Overweight and obesity		LHD	✓
Environmental tobacco smoke		LHD	✓
Substance use		LHD	✓
Parental health status		Not available	×
Injuries		LGA	✓
Suicide		LGA	Small numbers
Congenital anomalies		LGA	Small numbers
Newborn hearing screening		Broken Hill only	✓ Limited data
Childhood immunisation		Maari Ma communities	✓
Education			
Early learning		LHD	✓
Transition to primary school		Region	✓
Attending early childhood education programs		LHD	✓

		Location of reported data	Local data collection currently in place
Attendance at school	Primary school	Region	✓
	Secondary school	Region	✓
Reading, writing and numeracy		Region	✓
School relationships and bullying		Not available	✗
Community Services			
Children in out-of-home care		LGA	✓
Child abuse and neglect		LGA	✓
Homelessness		State	✗
Child protection re-substantiations		State	✓ ⁷
Bureau of Crime Statistics			
Neighbourhood safety		LGA	✗
Children as victims of violence		LGA	✓
Children and crime		LGA	✓
Other			
Quality childcare		Community	✓
Social and emotional development		Not available	✗
Family functioning		LGA	✓
Family economic situation		Not available	✗
Social capital		LHD	✓

⁷ Data collected locally but aggregated to State level for reporting

Part Two: Where do our children live?

This chapter describes the region's child population to provide a context for exploring children's health, development and well-being. Far Western NSW's child population is described in terms of its size and composition, as well as its socio-economic profile.

The region's geography

Geography, climate, history, growth and development all influence our health status. The climate and vegetation influences what flora and fauna there are, as well as the organisms which act as carriers of disease. It also has an impact on the production and availability of foods. As people increase their capacity to adapt to this environment, the patterns of human settlement, levels of sanitation and the impact on our natural resources all have an impact on our health.

The Maari Ma region is situated in the far west of NSW, encompassing an area of 194,811 square kilometres. This equates to approximately one quarter of the total area of the state. However, only 30,095 people live in this vast area, with an average of 1 person per 5 square kilometres.

Area and population density, Maari Ma region, NSW and Australia, 2011

Area	Population	Area (sq. km)	Density (persons per sq. km)
Maari Ma region	30,095	194,811	0.2
NSW	6,917,661	800,809	8.6
Australia	21,507,719	7,688,000	2.8

Source: ABS Census 2011

The Maari Ma region encompasses the local government areas of Balranald, Broken Hill, Central Darling (including the towns of Ivanhoe, Menindee and Wilcannia), Wentworth and the Unincorporated Far West (including the town of Tibooburra).

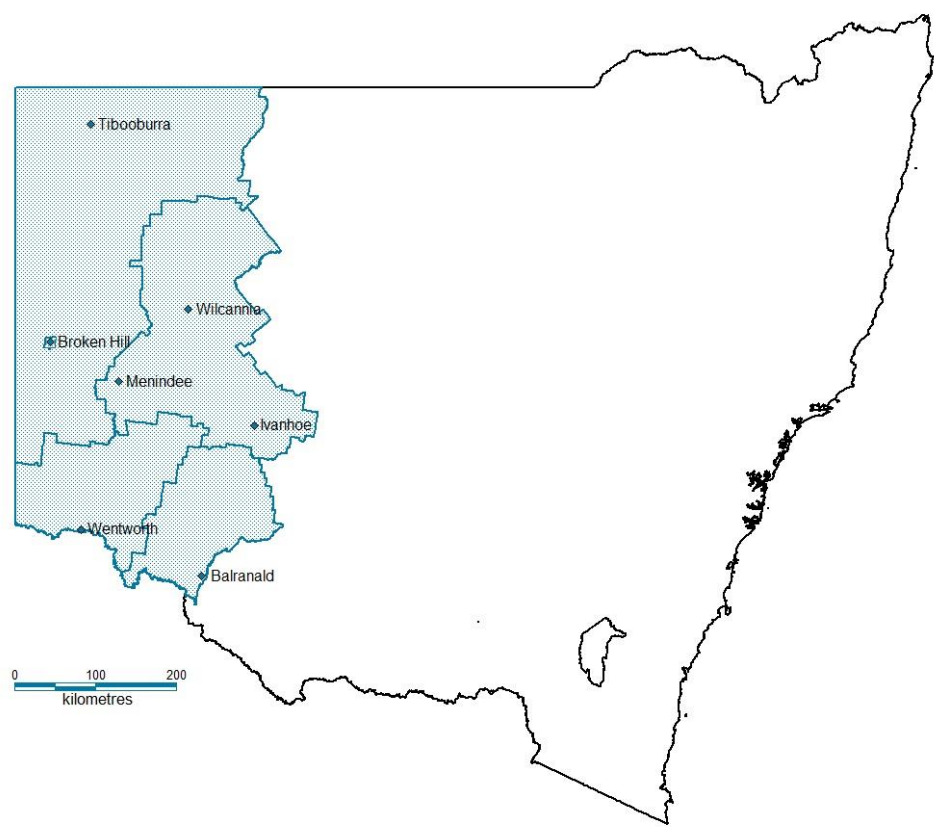
Broken Hill is the major service centre for the region with the surrounding towns using the city for its wide range of facilities and services. Also, there are close family linkages between the Aboriginal population in Broken Hill and the nearby towns, as the majority of Broken Hill's Aboriginal residents have migrated from the neighbouring communities in the Central Darling Shire and the Unincorporated Area of the Far West in recent years. Over the last five censuses there has been a discernible migration into Broken Hill.

While the region's population overall continues to decrease, the number of Aboriginal people enumerated in Broken Hill has risen by, on average, more than 40% at each census since 1991.

Of the 5 Local Government Areas that make up the region, 4 have ARIA categories of either 'remote' or 'very remote'⁸.

⁸ The University of Adelaide, ARIA (Accessibility/Remoteness Index of Australia), 2014, viewed 14 February 2014, http://www.adelaide.edu.au/apmrc/research/projects/category/about_aria.html

Maari Ma region



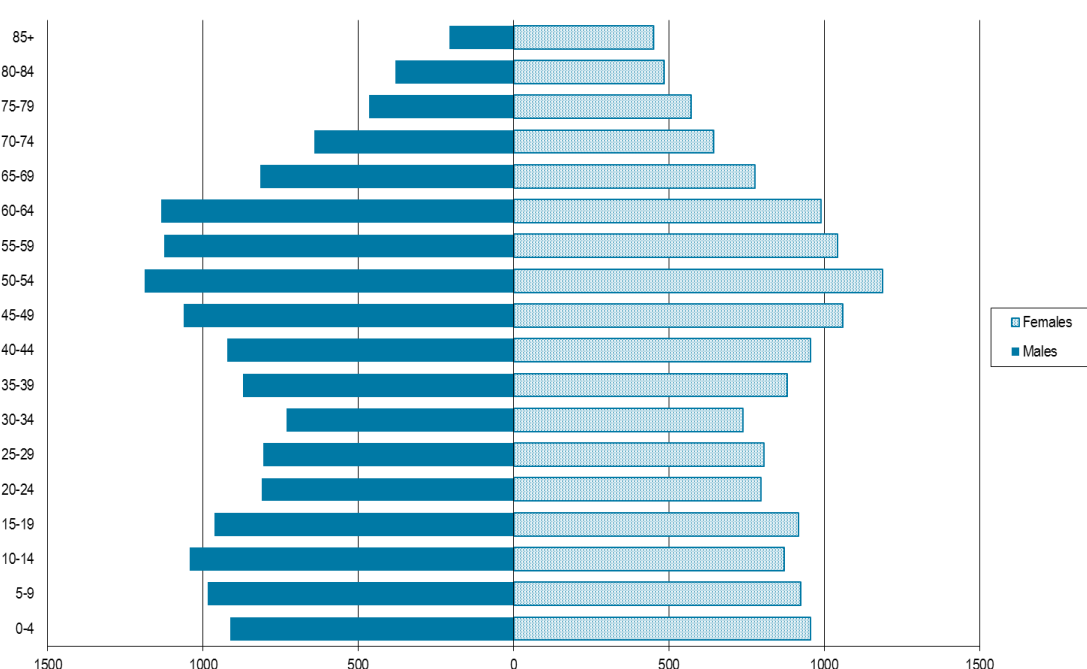
Source: MapInfo

The region's population

According to the 2011 Australian Bureau of Statistics (ABS) Census, the population of the Maari Ma region was 30,095 persons, of which 50% were male. Aboriginal people account for 10.1% (up from 8.7% in 2006) of the population, in comparison to 2.5% of the NSW population (up from 2.0% in 2006).

The population pyramid is typical of remote and rural populations. It shows a high proportion of aged people and many young people leaving the region for schooling, university and employment opportunities.

Population pyramid, Maari Ma region, 2011



Source: ABS Census 2011

Socio-economic status

Socio-economic status is an important indicator of health in the community. People with the most limited economic resources experience poorer health with higher rates of death and illness. Of all the people in the community, those of low socio-economic status are more likely to suffer disability, have serious chronic illness or suffer acute illnesses.

Many diseases and illnesses affecting people of low socio-economic status are also likely to coexist with risk factors such as smoking, being overweight, being inactive and not breastfeeding infants.

Socio-economic indices for areas (SEIFA) are used by the ABS to summarise aspects of socio-economic conditions. SEIFA is a suite of four indexes that have been created from social and economic census information.

The indexes are assigned to areas, not to individuals. They indicate the average socio-economic characteristics of the households, families and individuals living in the area.

The scores are 'ordinal'. This means that they don't represent the magnitude of advantage or disadvantage but rather that one place is 'more' or 'less' advantaged/disadvantaged than another place.

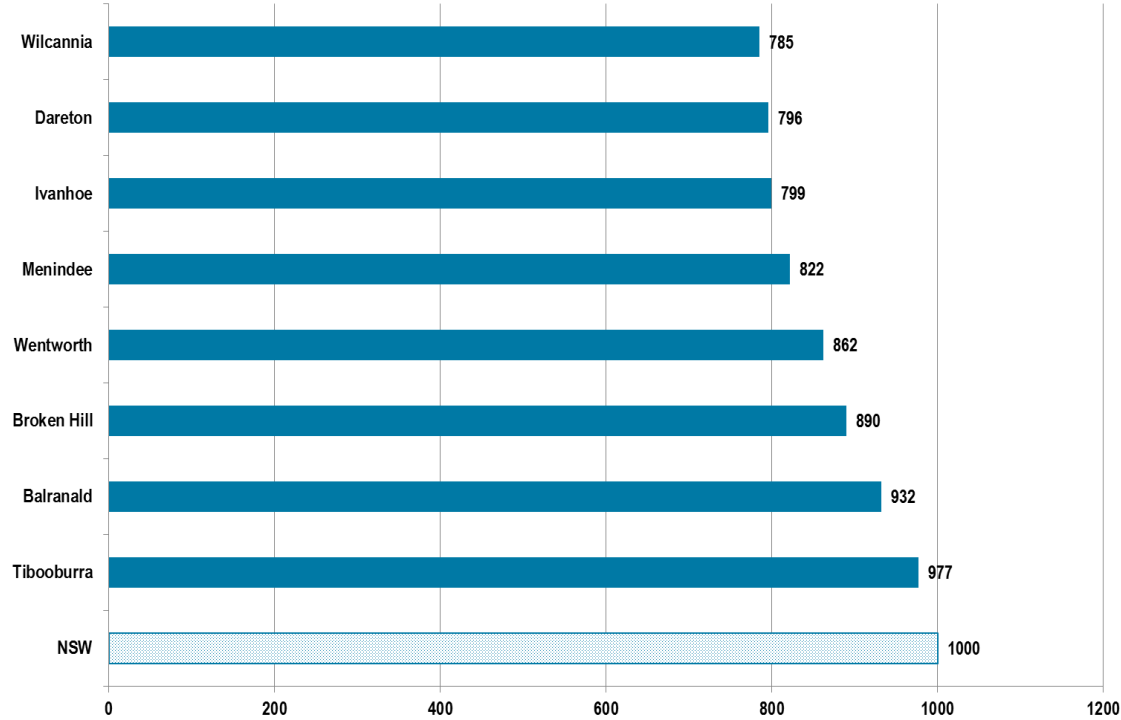
Against all four indices for the six census periods 1986, 1991, 1996, 2001, 2006 and 2011, far western NSW was below the mean. This means the region has a relatively low proportion of high-income households and small proportions of people with tertiary qualifications and people employed in skilled occupations.

Central Darling Shire is ranked as the second most disadvantaged area in the state. Social statistics on average show a socio-economically disadvantaged region, with fewer residents completing their secondary education and more people in the social welfare system, compared with the rest of NSW.

The following chart shows the 2011 results for the communities in the region for the index of advantage and disadvantage. The Index of Relative Socio-economic Advantage and Disadvantage summarises information about the economic and social conditions of people and households within an area, including both relative advantage and disadvantage measures. The lower the number, the greater the disadvantage.

In the Maari Ma region there are more people who are earning lower incomes and, if employed, tend to be in un- or low-skilled jobs. Rent tends to be lower than in other parts of NSW and fewer people own their own home. Fewer residents have higher education qualifications and more people have left school without completing Year 12.

Relative index of socio-economic advantage and disadvantage for Maari Ma communities compared to NSW



Source: ABS Census 2011

People with high incomes generally experience better health than people on low incomes do. Low incomes have also been linked to greater prevalence of risk factors.

Information on income distribution is important in planning public and private sector services such as social welfare and, particularly at the regional level, retail distribution and other commercial services. Information relating to income and its effects provide a basis for understanding the health of the community.

Income from some sources may be negative. In most cases income is reported as a positive figure (salaries and wages for instance) and you report the amount before taking into account deductions. Sometimes income can be reported as a negative figure where the amount of money earned will include the expenses used to earn that money – if the only earnings are from rental properties or self-employment.

The 2011 individual weekly income of the region's residents is shown in the following table. There is a substantial difference in earnings between Aboriginal people in the Maari Ma region and NSW as a whole, with 33.7% of the total population in NSW earning \$800 or more a week, compared to 13.1% in the Maari Ma region. Within the Maari Ma region, Aboriginal people have lower average incomes than the total population.

The individual weekly income is similar between the two census periods for Aboriginal people in the Maari Ma region and in NSW. This also applies to the total population in the Maari Ma region and NSW as a whole. However, there has been an increase in the percentage of the population that earn \$800 or more a week across the board.

Individual income, Aboriginal and total population, Maari Ma region compared to NSW, 2011

		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
Negative/Nil	2006	7.9%	6.0%	8.1%	7.8%
	2011	8.2%	6.2%	9.0%	8.6%
\$1-\$299	2006	37.4%	27.8%	31.2%	20.8%
	2011	^{Λ*} ↓30.1%	21.6%	26.1%	17.9%
\$300-\$799	2006	32.4%	39.0%	37.1%	35.9%
	2011	^{Λ*} ↑37.1%	38.2%	36.0%	31.8%
\$800 or more	2006	7.2%	16.7%	12.0%	26.3%
	2011	^{@#} ↑13.1%	24.0%	19.1%	33.7%
Not stated	2006	15.1%	9.9%	11.6%	9.1%
	2011	^{Λ*} ↓11.8%	10.1%	9.9%	8.0%

[↓]significantly lower than the previous period MM-R Aboriginal population result

[↑]significantly higher than the previous period MM-R Aboriginal population result

[#]significantly lower than the current NSW Aboriginal population result

^{*}significantly higher than the current NSW Aboriginal population result

[@]significantly lower than the current NSW total population result

[^]significantly higher than the current NSW total population result

Source: ABS Census 2006 & 2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Negative/Nil	-	-	-
\$1-\$299	LOWER	HIGHER	HIGHER
\$300-\$799	HIGHER	HIGHER	HIGHER
\$800 or more	HIGHER	LOWER	LOWER
Not stated	LOWER	HIGHER	HIGHER

- not significantly different

Employment

There is a strong evidence base showing that 'work' is generally beneficial for physical and mental health and well-being. Conversely, not working is associated with poorer physical and mental health and well-being. Gainful employment can reverse the adverse health effects of unemployment. That is true for healthy people of working age, for many disabled people, for most people with common health problems and for those on government benefits⁹.

According to the 2011 Census Dictionary the labour force includes people aged 15 and over who:

- ⦿ Work for payment or profit, or as an unpaid helper in a family business, during the week prior to census night;
- ⦿ Have a job from which they are on leave or otherwise temporarily absent;
- ⦿ Are on strike or stood down temporarily; or
- ⦿ Do not have a job but are actively looking for work and available to start work.

The following people are classified as being in the labour force:

- ⦿ Employed people (the first three groups above)
- ⦿ Unemployed people (the last group above).

People aged 15 years and over who are not employed or unemployed are classified as not in the labour force. This includes people who are retired, pensioners and people engaged solely in home duties.

⁹ G. Waddell G & A.K. Burton, *Is work good for your health and well being?* TSO, London, 2006, viewed 28 March 2014, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214326/hwwb-is-work-good-for-you.pdf

The table shows the percentage of employed and unemployed people aged 15 years and over in the Maari Ma region and in NSW. The data demonstrates that between the two census periods there has been little change in the percentage of employed and unemployed people in the Maari Ma region and NSW overall. At the time of the 2011 census the unemployment rate in the region was 7.3%, compared to 5.9% for NSW.

Employment, people aged 15 years and over, Maari Ma region and NSW, 2006 and 2011

		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
Employed	2006	73.7%	92.4%	80.7%	94.1%
	2011	@#75.8%	92.7%	83.1%	94.1%
Unemployed	2006	26.3%	7.6%	19.3%	5.9%
	2011	^*24.2%	7.3%	16.9%	5.9%
Total labour force	2006	43.5%	53.2%	51.2%	58.9%
	2011	@43.9%	53.7%	51.2%	59.7%
Not in the labour force	2006	50.4%	39.8%	43.8%	34.3%
	2011	^*51.4%	37.2%	44.7%	34.6%
Not stated	2006	6.1%	7.0%	4.9%	6.8%
	2011	4.8%	6.7%	4.1%	5.7%

#significantly lower than the current NSW Aboriginal population result

*significantly higher than the current NSW Aboriginal population result

@significantly lower than the current NSW total population result

^significantly higher than the current NSW total population result

Source: ABS Census 2006 & 2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Employed	-	LOWER	LOWER
Unemployed	-	HIGHER	HIGHER
Not in the labour force	-	HIGHER	HIGHER
Not stated	-	-	-
Total labour force	-	-	LOWER

- not significantly different

Youth employment

The following table shows the percentage of employed and unemployed 15-24 year olds in the Maari Ma region compared to NSW. A greater percentage of the Aboriginal youth population are unemployed, both in the Maari Ma region and in NSW.

Employment, people aged 15-24 years, Maari Ma region and NSW, 2006 and 2011

		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
Employed	2006	65.3%	85.5%	72.6%	88.5%
	2011	@#66.4%	87.8%	73.2%	87.2%
Unemployed	2006	34.7%	14.5%	27.4%	11.5%
	2011	^*33.6%	15.7%	26.8%	12.8%
Total labour force	2006	39.4%	62.0%	48.9%	59.8%
	2011	@#37.7%	58.4%	48.2%	58.3%
Not in the labour force	2006	53.4%	29.7%	46.5%	33.9%
	2011	^*57.7%	34.9%	48.4%	36.5%
Not stated	2006	7.2%	7.0%	4.6%	6.3%
	2011	4.6%	7.5%	3.5%	2.5%

#significantly lower than the current NSW Aboriginal population result

*significantly higher than the current NSW Aboriginal population result

@significantly lower than the current NSW total population result

^significantly higher than the current NSW total population result

Source: ABS Census 2006 & 2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Employed	-	LOWER	LOWER
Unemployed	-	HIGHER	HIGHER
Not in the labour force	-	HIGHER	HIGHER
Not stated	-	-	-
Total labour force	-	LOWER	LOWER

- not significantly different

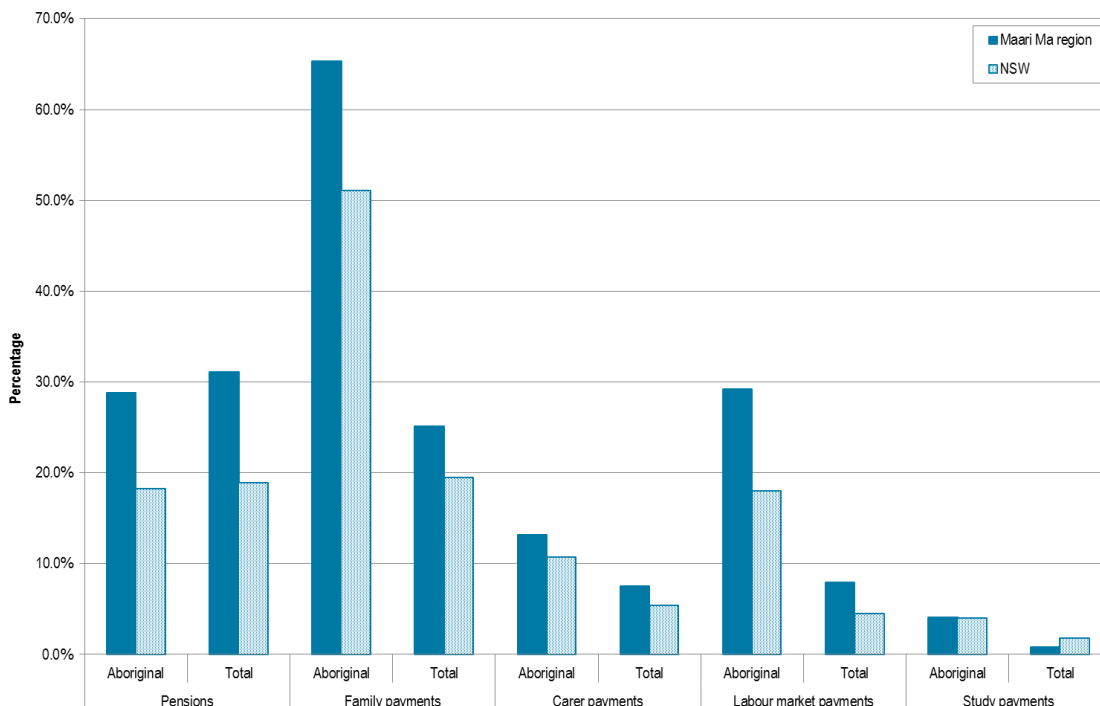
Government benefits

Government benefits can be paid to people who are unemployed, people with children, students, people who are sick or disabled, carers and people who have reached retirement age and choose not to work.

In 2013, in the Maari Ma region, people received government benefits at a higher rate (72.4%) than in NSW (50.0%). These rates are comparable to the 2006 figures of 73.8% for the Maari Ma region and 55.3% in NSW.

The rate of people receiving pension payments (aged, disability or carer pensions for example) in the Maari Ma region was approximately 60% higher than the NSW rate, whilst people received labour force payments (for example unemployment benefits) at a rate 55% higher than the state figure.

Government benefits, Maari Ma region and NSW, September 2013¹⁰



Source: Department of Human Services, 2013

¹⁰ Total percentages may be greater than 100 due to individuals receiving more than one benefit

Housing overcrowding

Overcrowding occurs when the dwelling size is too small for the size and composition of the household living in it. Underuse occurs when the dwelling size is larger than that required to adequately house the household.

Overcrowding of dwellings increases the stress on kitchens, bathrooms, laundry facilities and sewage systems, which in turn increases the risk of spreading infectious diseases between residents and places unnecessary strain on interpersonal relationships¹¹.

The AIHW uses the internationally accepted measure of housing utilisation developed by the Canadian National Occupancy Standard. The Canadian model is sensitive to both household size and composition and uses the following criteria to assess bedroom requirements

- ⦿ there should be no more than two people per bedroom
- ⦿ a household of one unattached individual may reasonably occupy a bed-sit (i.e. have no bedroom)
- ⦿ couples and parents should have a separate bedroom
- ⦿ children less than five years of age, of different sexes, may reasonably share a bedroom
- ⦿ children five years of age or over, of the opposite sex, should not share a bedroom
- ⦿ children less than 18 years of age and of the same sex may reasonably share a bedroom
- ⦿ single household members aged 18 years or over should have a separate bedroom.

Using this criteria and data from the 2011 census, the following table outlines overcrowding in the Maari Ma region and NSW as a whole. It should be noted that an 'Aboriginal household' is one where at least one person has identified as being Aboriginal, not all household occupants need be Aboriginal.

The table shows that in 2011 significantly more 'Aboriginal households' in the Maari Ma region were overcrowded and significantly less were a suitable size compared to 'Aboriginal households' in NSW.

¹¹ Australian Institute of Health and Welfare, *Housing assistance in Australia 2012*, viewed 27 March 2014, <https://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129542293>

Housing overcrowding, by household, Maari Ma region and NSW, 2006 and 2011

		Maari Ma region				NSW			
		Aboriginal		Total		Aboriginal		Total	
		N	%	N	%	N	%	N	%
Overcrowded households	2006	34	3.8%	105	0.9%	1,177	2.1%	21,256	0.9%
	2011	40	[^] *3.7%	35	0.3%	1,355	1.8%	26,471	1.1%
Unable to be classified	2006	310	34.5%	2,058	17.1%	18,416	32.2%	490,078	21.1%
	2011	328	[^] _↓ 30.1%	1,515	14.3%	23,037	31.2%	501,156	20.9%
Suitable size for residents	2006	501	55.9%	9,531	79.1%	35,424	61.9%	1,765,875	75.8%
	2011	657	[@] _# ↑60.4%	8,711	82.3%	47,150	63.8%	1,824,732	76.1%
Not stated	2006	52	*5.8%	359	2.8%	2,226	3.9%	51,007	2.2%
	2011	63	[^] *5.8%	327	3.1%	2,369	3.2%	45,119	1.9%

[↓]significantly lower than the previous period MM-R Aboriginal population result

[↑]significantly higher than the previous period MM-R Aboriginal population result

[#]significantly lower than the current NSW Aboriginal population result

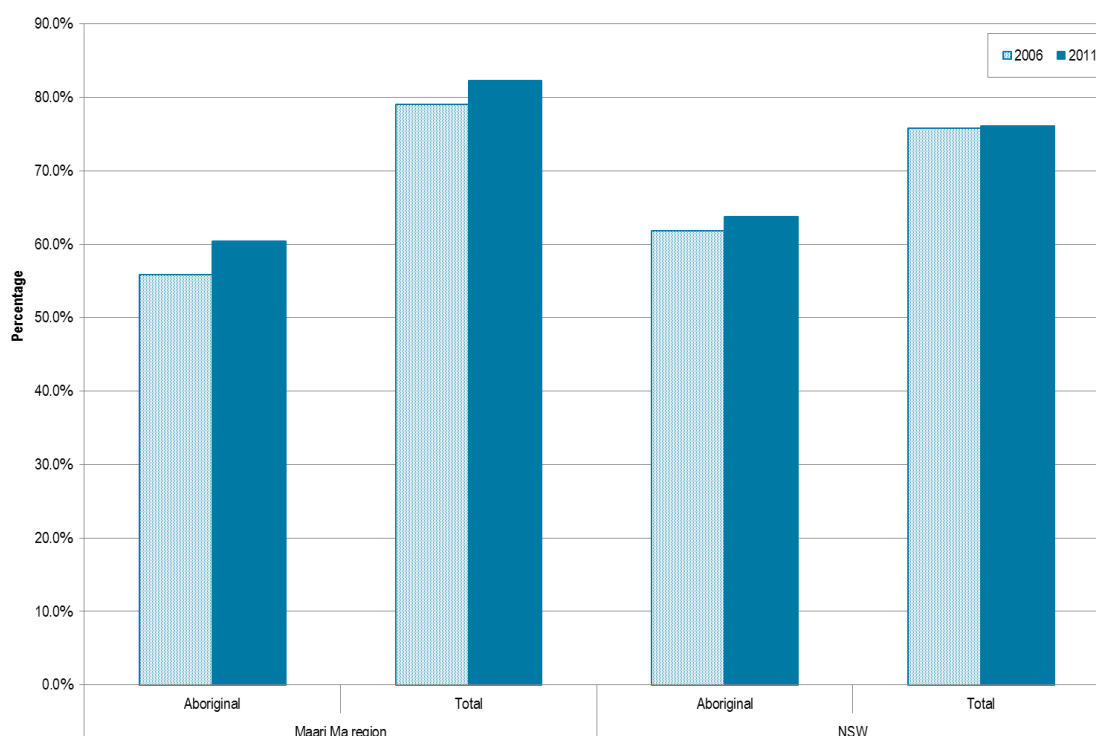
*significantly higher than the current NSW Aboriginal population result

[@]significantly lower than the current NSW total population result

[^]significantly higher than the current NSW total population result

Source: ABS Census 2006 & 2011

Percentage of houses that are a 'suitable size' for residents, Maari Ma region and NSW, 2006 and 2011



Source: ABS Census 2006 & 2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Overcrowded households	-	HIGHER	HIGHER
Unable to be classified	LOWER	-	HIGHER
Suitable size for residents	HIGHER	LOWER	LOWER
Not stated	-	HIGHER	HIGHER

- not significantly different

Education

Education is an extremely important determinant of health. Level of education is related to most lifestyle behaviours and health outcomes, from low birth weight and child death rates to rates of diabetes, heart disease and cancer.

An educational institution, as defined by the ABS, is a school (pre, primary and secondary), TAFE, university or tertiary institution. Also included are those institutions that offer courses such as Associations.

Enrolled in an educational institution

The table indicates the number and percentage of people in the Maari Ma region and in NSW that were attending educational institutions at the time of the 2006 and 2011 Census. Of the total population living in the Maari Ma region, in 2011, only 19.6% (n=5904) were enrolled in an educational institution, compared to 29.4% in 2006. Comparatively, in 2011, 23.8% of people living in NSW were enrolled in an educational institution, compared to 23.5% in 2006. The percentages of people in the Maari Ma region and NSW that were enrolled in an educational institution are higher for Aboriginal people than the total population.

Number and percentage of people enrolled in an educational institution, Maari Ma region and NSW, 2006 and 2011

	Maari Ma region				NSW			
	Aboriginal		Total		Aboriginal		Total	
	N	%	N	%	N	%	N	%
2006	678	25.0%	9,174	29.4%	47,113	34.0%	1,541,640	23.5%
2011	901	29.8%	5,904	19.6%	59,692	34.6%	1,649,571	23.8%

Source: ABS Census 2006 & 2011

Year of school completed

The table shows the year of school completed for people in the Maari Ma region compared to NSW. According to the 2011 Census, 20.6% of Aboriginal people in the Maari Ma region left school before completing Year 10, compared to the total figure of 14.6% for the region. Of the Aboriginal population in NSW, 17.4% had left school before Year 10 in 2011, compared to the total figure of 7.9%. The 2011 figures are similar to the 2006 Census figures however the number of Aboriginal students leaving school before Year 10 has decreased.

Year of school completed, Maari Ma region and NSW, 2006 and 2011

		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
Year 12	2006	9.5%	23.5%	21.2%	47.2%
	2011	@ [#] 12.7%	26.4%	25.0%	52.0%
Year 11	2006	8.3%	10.2%	9.1%	6.6%
	2011	[^] 9.4%	10.5%	9.9%	6.5%
Year 10	2006	32.8%	35.8%	35.4%	28.8%
	2011	[^] 34.7%	35.2%	35.7%	26.4%
Year 9	2006	25.3%	15.3%	19.4%	8.8%
	2011	[^] *20.6%	14.6%	17.4%	7.9%
Year 8	2006	22.6%	14.5%	13.8%	7.4%
	2011	[^] *21.3%	12.7%	11.1%	6.1%
Did not go to school	2006	1.4%	0.7%	1.1%	1.2%
	2011	1.2%	0.6%	0.9%	1.1%

[†]significantly higher than the previous period MM-R Aboriginal population result

[#]significantly lower than the current NSW Aboriginal population result

*significantly higher than the current NSW Aboriginal population result

@ significantly lower than the current NSW total population result

[^]significantly higher than the current NSW total population result

Source: ABS Census 2006 & 2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for the current Maari Ma Aboriginal are significantly (a better result is shaded) ...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Year 12	HIGHER	LOWER	LOWER
Year 11	HIGHER	-	HIGHER
Year 10	HIGHER	-	HIGHER
Year 9	-	HIGHER	HIGHER
Year 8	-	HIGHER	HIGHER
Did not go to school	-	-	-

- not significantly different

Educational qualifications

The following table shows the educational qualifications of people in the Maari Ma region compared to NSW. The percentages for all educational qualifications are similar for the Aboriginal population and total population in the Maari Ma region.

Approximately three quarters of the Aboriginal population that had an educational qualification in the Maari Ma region and in NSW had attained a Certificate as their qualification.

The proportion of the NSW total population (30.8%) that have achieved a Bachelor's degree is three times greater than the proportion of the Aboriginal population (9.7%) in the Maari Ma region.

Educational qualifications, Maari Ma region and NSW, 2006 and 2011

		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
Postgraduate degree	2006	0.0%	2.1%	2.4%	7.6%
	2011	@0.0%	2.4%	2.6%	9.3%
Graduate diploma/Graduate certificate	2006	0.0%	3.3%	2.0%	3.1%
	2011	*↑5.0%	3.2%	1.9%	3.2%
Bachelor degree	2006	12.0%	18.5%	14.7%	29.7%
	2011	@#9.7%	18.1%	14.2%	30.8%
Advanced diploma/diploma	2006	23.2%	14.1%	15.4%	18.2%
	2011	↓16.2%	14.6%	15.6%	18.1%
Certificate	2006	64.8%	62.0%	65.5%	41.4%
	2011	^69.1%	61.7%	65.7%	38.6%

↓significantly lower than the previous period MM-R Aboriginal population result

↑significantly higher than the previous period MM-R Aboriginal population result

#significantly lower than the current NSW Aboriginal population result

*significantly higher than the current NSW Aboriginal population result

@significantly lower than the current NSW total population result

^significantly higher than the current NSW total population result

Source: ABS Census 2006 & 2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Postgraduate degree	-	LOWER	LOWER
Graduate diploma/graduate certificate	HIGHER	HIGHER	-
Bachelor degree	-	LOWER	LOWER
Advanced diploma/diploma	LOWER	-	-
Certificate	-	-	HIGHER

- not significantly different

The region's children

In 2011, there were 7,567 children and young people aged 0-19 years in the Maari Ma region, of which 1,364 were Aboriginal (18%). This is much higher than the total Aboriginal population proportion in the Maari Ma region (10.1%).

From 2007 to 2011 there has been an average of 387 babies born per year to women who live in the Maari Ma region (including babies born in Victorian hospitals). Seventeen percent of the babies born were Aboriginal.

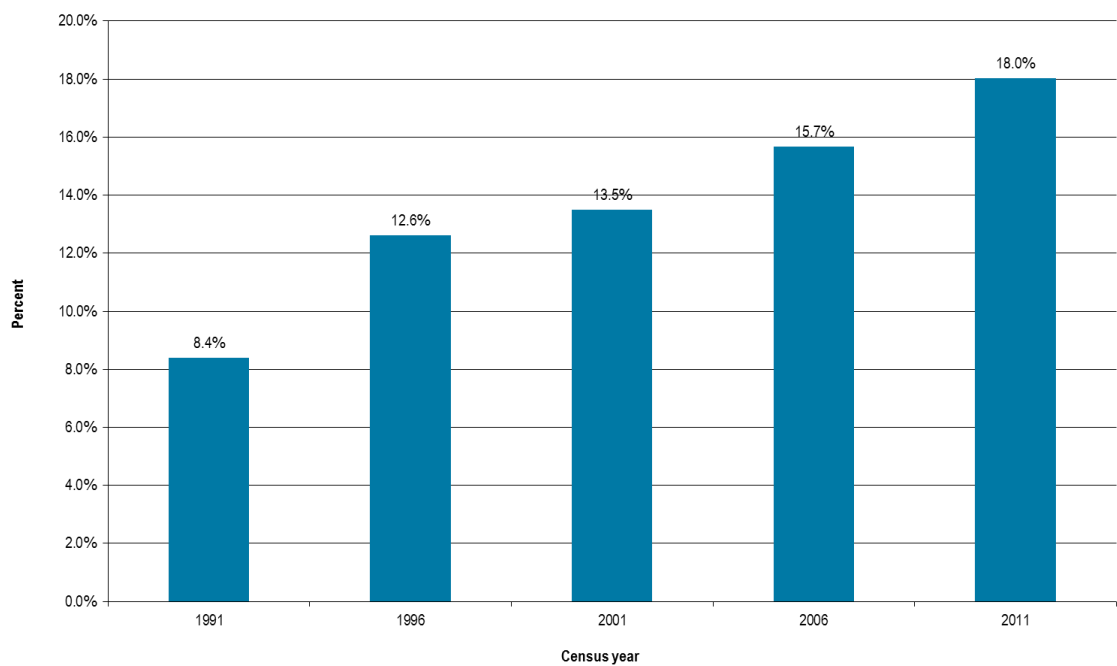
Percentage of children who are Aboriginal, aged 0-19, Maari Ma region and NSW, 2006 and 2011

	Maari Ma region				NSW			
	2006 Aboriginal %	2006 Aboriginal N	2011 Aboriginal %	2011 Total N	2006 Aboriginal %	2006 Aboriginal N	2011 Aboriginal %	2011 Total N
Children aged 0-4 years	16.9%	348	18.7%	1,869	4.1%	21,412	4.7%	458,735
Children aged 5-9 years	16.1%	331	17.3%	1,902	4.1%	20,390	4.7%	434,608
Young people aged 10-14 years	15.5%	342	17.7%	1,919	4.1%	20,781	4.7%	439,169
Young people aged 15-19 years	14.5%	343	18.4%	1,871	3.4%	19,403	4.4%	443,418
All children and young people aged 0-19 years	15.7%	1,364	18.0%	7,567	3.9%	81,986	4.6%	1,775,930
Total population	8.7%	4.5%	10.1%	25.1%	2.1%	1.2%	2.5%	25.7%

Source: ABS Census 2006 & 2011

The proportion of the Aboriginal population aged 0-19 years has increased more than two-fold since the 1991 census – from 8.4% in 1991 to 18% in 2011.

Percentage of the Aboriginal population who are children aged 0-19, ABS census, 1991-2011



Source: ABS Census 1991-2011

Part Three:

How healthy are our children?

Good health is an important element in a child's quality of life as it can influence participation in many aspects of life, including schooling and recreation. This part focuses on general measures of health status, namely the presence or absence of disease, or activity and participation restrictions.

Mortality

Australia's Children 2012 says:

Infant and child death rates provide insight into the social and environmental conditions in which Australia's children grow and develop.

We found that:

While the rates for the total population of the Maari Ma region and NSW have decreased for perinatal mortality, the rate for the Aboriginal population in the Maari Ma region has increased from the 2002-2006 to the 2007-2011 period.

The infant mortality rate has decreased for Aboriginal children in the Maari Ma region from 1997 to 2011.

Mortality data are used to describe severe ill health that results in death. It can be used to identify sections of the community most at risk. Due to the small number of deaths each year, a number of years of data have been combined. However, the numbers used to calculate rates are small and consequently can result in large fluctuations between time periods. This should be taken into consideration when interpreting the results.

Perinatal mortality

A perinatal death is a stillbirth or death of a baby within the first month of life.

The table shows the number of perinatal deaths and mortality rate for the Maari Ma region and NSW from 1997-2011. The perinatal mortality rate for Aboriginal infants in the Maari Ma region is similar to the rate for Aboriginal infants in NSW. However, the perinatal mortality rate in the Maari Ma region is twice that of the rate for all NSW infants and is significantly higher.

The perinatal mortality rate has declined from the 1997-2001 period to the 2002-2006 period for Aboriginal infants in the Maari Ma region and in NSW. However, the Aboriginal rates have increased threefold since the 2002-2006 period. Due to the small numbers in the Maari Ma region these data should be interpreted with caution.

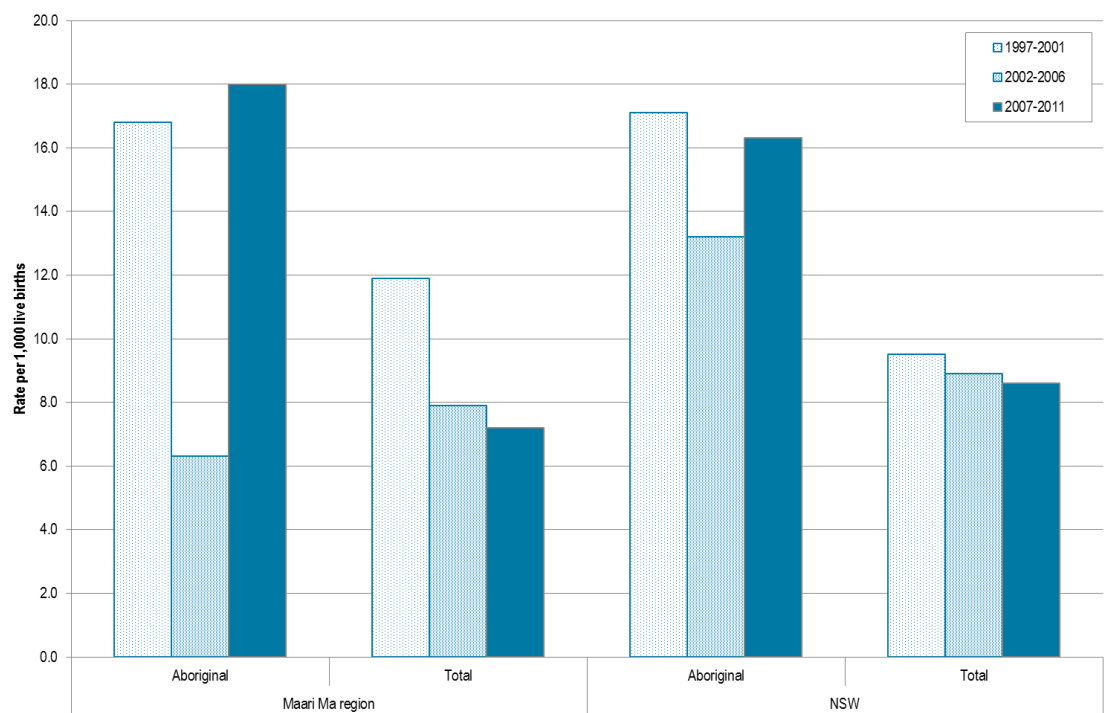
Total number of perinatal deaths and mortality rate (per 1,000 births), Maari Ma region and NSW, 1997-2011

	Maari Ma region				NSW			
	Aboriginal		Total		Aboriginal		Total	
	N	Rate	N	Rate	N	Rate	N	Rate
1997-2001	< 5	16.8	18	11.9	175	17.1	4,116	9.5
2002-2006	< 5	6.3	15	7.9	156	13.2	3,926	8.9
2007-2011	6	^a 18.0	14	7.2	244	16.3	4,118	8.6

^asignificantly higher than the current NSW total population result

Source: PNDC 1997-2011, ABS Census 2001, 2006 & 2011, Death data 1997-2011

Perinatal mortality rates, Maari Ma region and NSW, 1997-2011



Source: PNDC 1997-2011, ABS Census 2001, 2006 & 2011, Death data 1997-2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Perinatal mortality	-	-	HIGHER

-not significantly different

Infant mortality

Infant mortality is the death of an infant aged less than 1 year. A child's risk of death is greatest in the first year of life, and the first month in particular. The AIHW reports that the infant mortality rate reflects the effect of structural factors on population health, such as the prevailing health and hygiene conditions, and accessibility and effectiveness of the health system in maternal and perinatal care. The infant mortality rate is used internationally as the key measure of population and child health.

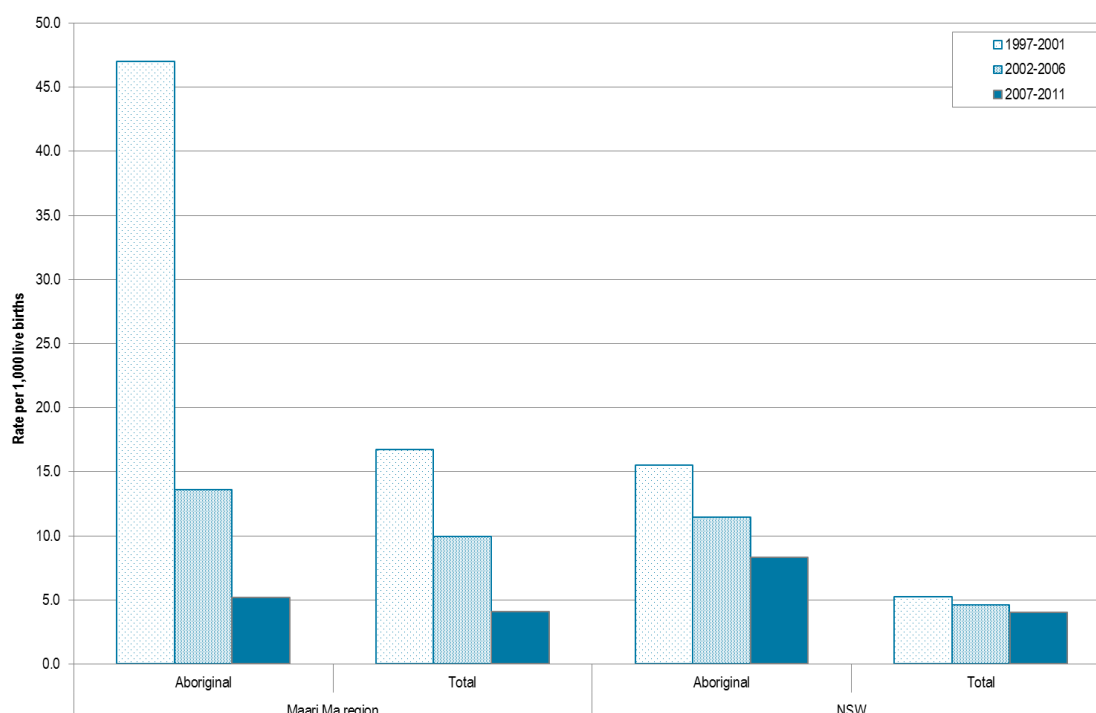
The data demonstrate that the infant mortality rate has decreased for Aboriginal children in the Maari Ma region from 1997 to 2011. The rate has also steadily decreased for the other populations. Due to the small numbers in the Maari Ma region these data should be interpreted with caution.

Total number of infant deaths and mortality rate (per 1,000 live births), Maari Ma region and NSW, 1997-2011

	Maari Ma region				NSW			
	Aboriginal N	Rate	Total N	Rate	Aboriginal N	Rate	Total N	Rate
1997-2001	11	47.0	25	16.7	156	15.5	2,234	5.2
2002-2006	< 5	13.6	13	9.9	133	11.4	2,005	4.6
2007-2011	< 5	5.2	8	4.1	123	8.3	1,913	4.0

Source: PNDC 1997-2011, ABS Census 2001, 2006 & 2011 Death data 1997-2011

Infant mortality rates, Maari Ma region and NSW, 1997-2011



Source: PNDC 1997-2011, ABS Census 2001, 2006 & 2011, Death data 1997-2011

There was no statistically significant difference between the current Maari Ma Aboriginal period result compared with the previous Maari Ma Aboriginal period result, the current NSW Aboriginal result and the current NSW total population result.

Chronic conditions

Australia's Children 2012 says:

Chronic conditions can affect normal growth and physical, social and emotional development processes, and accounts for a large proportion of the burden of disease among children.

We found that:

A similar proportion of children in the Far West have diabetes compared to NSW.

While not statistically significantly different, the rate of ear disease for Aboriginal children aged 0-4 years and 10-14 years in the Maari Ma region is lower than the NSW population as a whole.

Aboriginal children aged 0-4 are significantly more likely to be admitted for a respiratory illness compared to all NSW children of a similar age.

Diabetes

Diabetes is a chronic condition in which the body cannot properly use its main energy source, glucose. This occurs due to a deficiency in insulin, or the inability to use the insulin that is available. There are two main types of diabetes, Type 1 and Type 2.

Type 1 diabetes usually appears during childhood or adolescence and is marked by a complete lack of insulin, making insulin replacement necessary for survival. Type 2 diabetes is the most common form of diabetes among the Australian adult population and is marked by a reduced level of insulin or an inability of the cells to use insulin.

In the Maari Ma region, 1.5% of the population aged under 25 are currently registered under the National Diabetes Service Scheme. Comparably, 1.8% of NSW young people are registered.

Data relating to Aboriginal people are not available from the National Diabetes Service Scheme.

Cancer

Cancer is a disease in which cells become abnormal, grow in an uncontrolled manner and form a mass called a neoplasm or tumour.

Cancer causes significant morbidity and mortality for children, and was a leading cause of death for children between the ages of 1–14 in 2008-2010¹². Data for children and youth with cancer in the far west region of NSW are not reported here as the numbers are very small.

¹² Australian Institute of Health and Welfare, Key national indicators of children's health, development and wellbeing – Indicator framework for 'A picture of Australia's children - 2012', Cat. No. PHE 167, Canberra, October 2012

Otitis media (middle ear infection) in children commonly follows an upper respiratory tract infection. In its severest form, perforations of the eardrum can lead to chronic suppurative otitis media, hearing loss, and particularly with infants and younger children, delayed speech development, reduced learning ability and reduced social interaction.

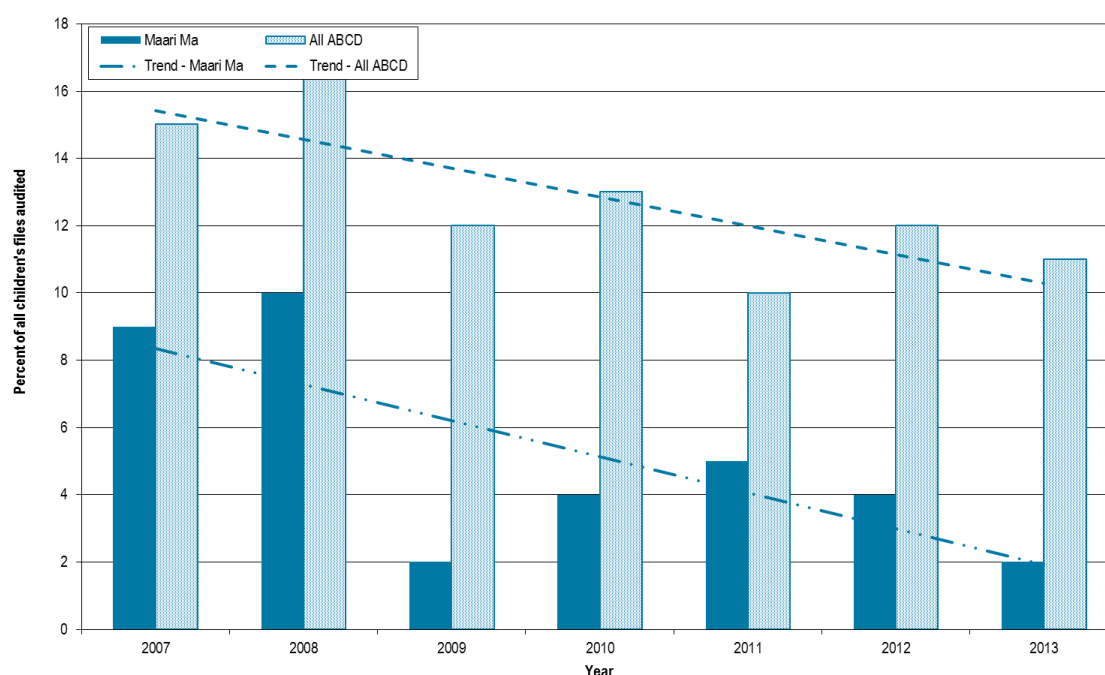
In some communities in remote Australia, the onset of ear disease often occurs in the first few weeks to few months of life. By 12 months, most children have ear disease of one form or another. Persistent or recurrent disease is common.

The annual Audit and Best Practice for Chronic Disease (ABCD) clinical audits for child health reviewed abnormal clinical findings for recurrent and chronic ear infections. The following definitions are used

- Recurrent ear infection: two or more ear infections in the past year;
- Chronic ear infection: an ear infection persisting for two weeks or more.

The following chart shows the results for the region for 2007-2013 compared to all participating sites in the nationwide ABCD program. Files were audited for current or chronic ear infections (using the above definition). The rate of disease has decreased over the past 7 years. The same pattern has been seen by all participating services albeit about 12 months after it was noted in the Maari Ma region.

Recurrent and chronic ear infections, Maari Ma region and all ABCD participating sites, 2007-2013



Source: ABCD 2007-2013

The following table and chart show the rates of admission to hospital for ear disease. None of the rates for the Maari Ma region are statistically different to the comparative NSW rates. Hospital admission rates may also differ due to varying practices of specialist services.

It is of interest that the admission rate for ear disease for Aboriginal children in the Maari Ma region is only slightly lower than NSW in the 1–4 year age group, but this difference is

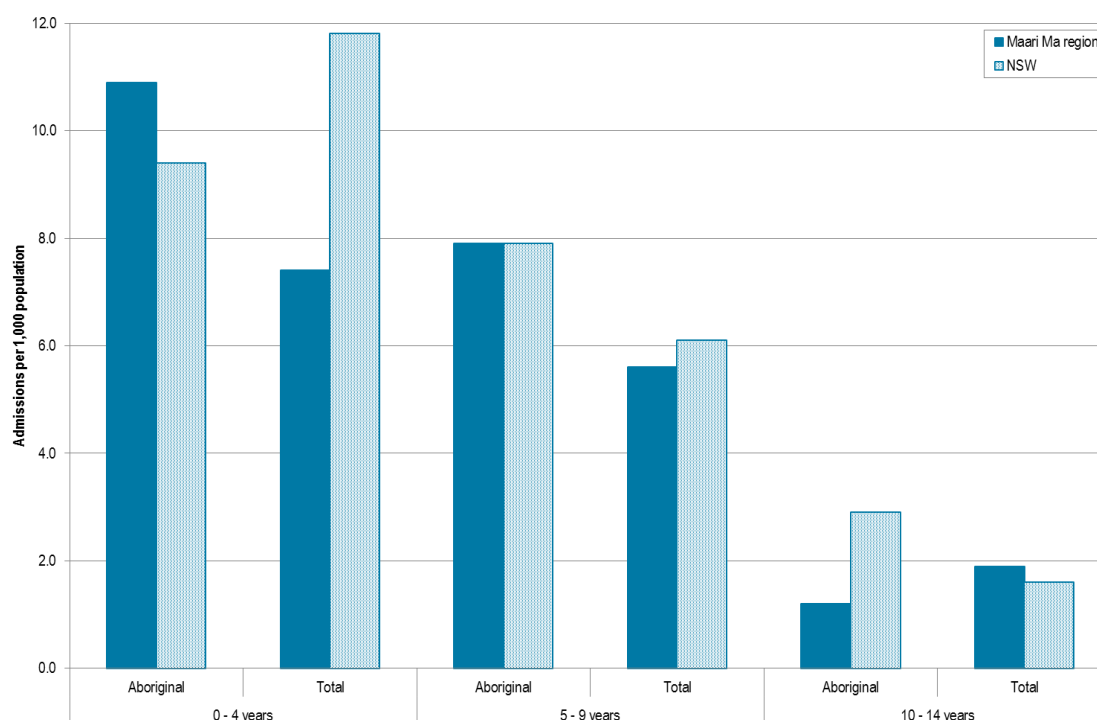
not significantly different and the numbers in the Maari Ma region are small. Generally, the admission rates for ear disease are very similar for Aboriginal children and the total population of children from the 2005/06-2007/08 period to the 2008/09-2012/13 period, both in the Maari Ma region and in NSW.

Ear disease, average number of admissions to hospital (per year [n]) and rates (per 1,000 population, per year), Maari Ma region and NSW, 2005/06 – 2007/08 and 2008/09 – 2012/13

Year	Age	Maari Ma region				NSW			
		Aboriginal n	Rate	Total n	Rate	Aboriginal n	Rate	Total n	Rate
2005/06- 2007/08	0-4 years	4.0	12.1	12.7	6.5	160.0	9.3	4,343.3	10.3
	5-9 years	3.7	10.9	12.0	5.7	138.0	7.8	2,630.7	6.1
	10-14 years	1.7	4.8	5.0	2.2	50.7	2.8	7,01.0	1.6
2008/09- 2012/13	0-4 years	3.8	10.9	13.8	7.4	200.6	9.4	5,408.2	11.8
	5-9 years	2.6	7.9	10.6	5.6	161.0	7.9	2,648.6	6.1
	10-14 years	0.4	1.2	3.6	1.9	59.4	2.9	683.6	1.6

Source: APDC 2005/06 – 2007/08 & 2008/09 – 2012/13, ABS 2006 & 2011

Ear disease admission rate, Maari Ma region and NSW, 2008/09-2012/13



Source: APDC 2008/09 – 2012/13, ABS Census 2011

There was no statistically significant difference between the current Maari Ma Aboriginal period result compared with the previous Maari Ma Aboriginal period result, the current NSW Aboriginal result and the current NSW total population result.

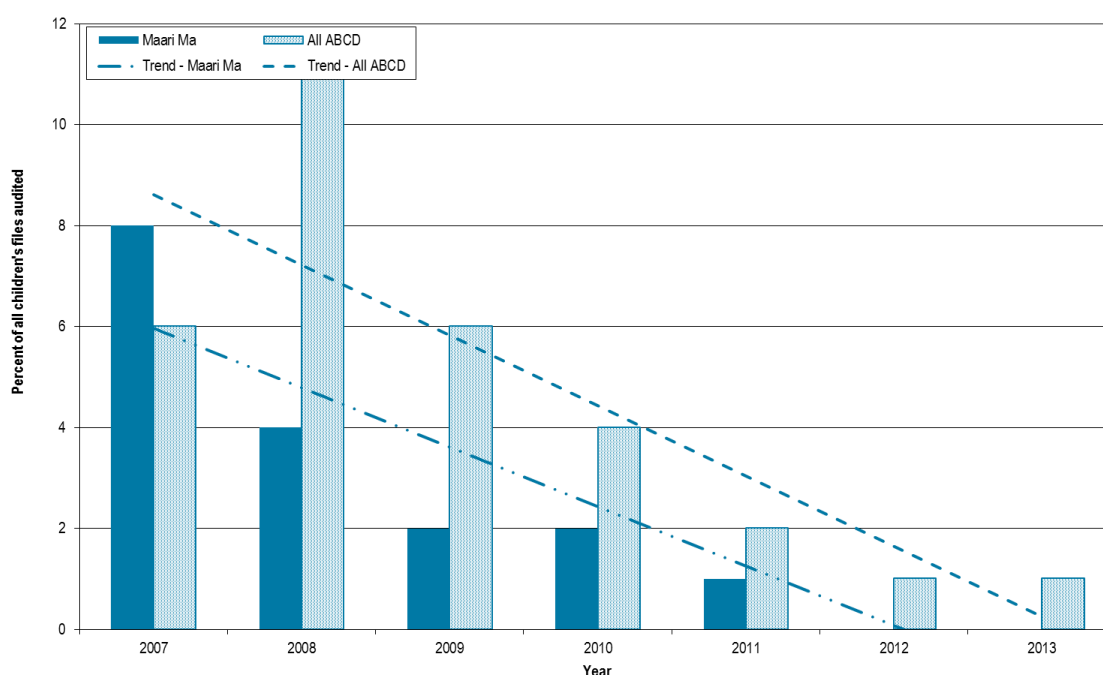
Chronic lung disease is an important contributor to the high rates of chronic illness in Indigenous communities and recurrent and chronic infections in childhood are recognised contributors to the development of chronic lung disease.

The annual ABCD clinical audits for child health reviewed abnormal clinical findings for chronic respiratory disease. The following definitions are used

- Recurrent or chronic respiratory disease: three or more episodes of chest infection requiring antibiotics in the previous year.

The following chart shows the results for the region for 2007-2013 compared to all participating sites in the nationwide ABCD program. Files were audited for current or chronic respiratory disease (using the above definition). The rate of disease has decreased over the 7 years. The same pattern has been seen by all participating services albeit about 12 months after it was noted in the Maari Ma region.

Recurrent and chronic respiratory disease, Maari Ma region and all ABCD participating sites, 2007-2013



Source: ABCD 2007-2013

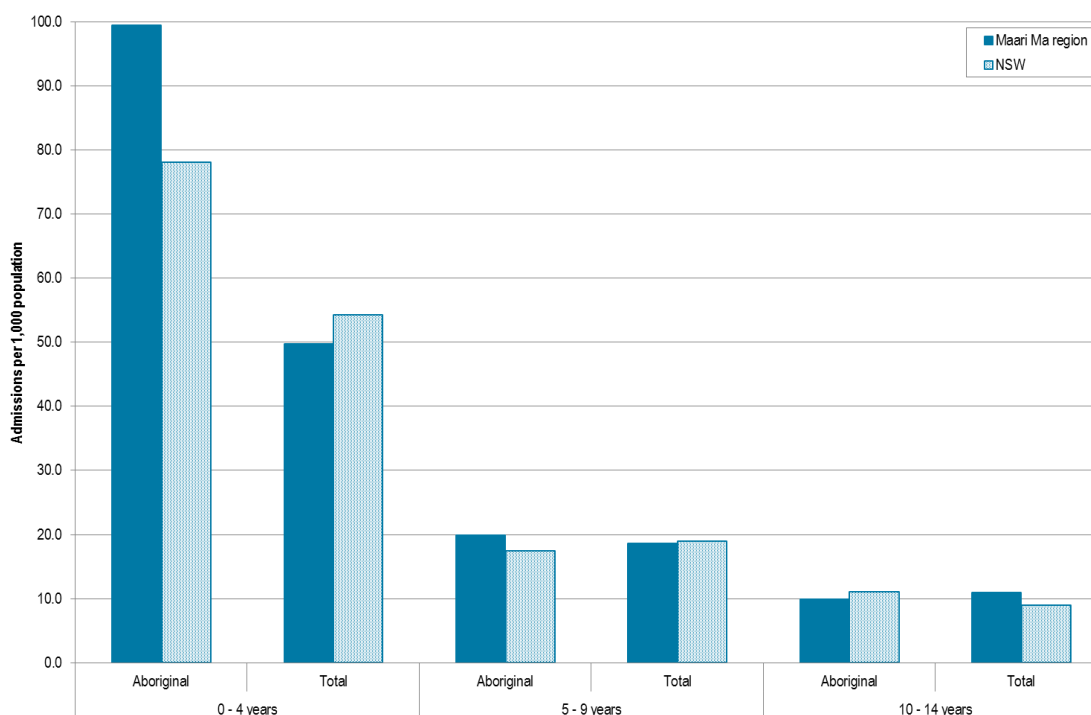
The following table and chart show the rates of admission to hospital for respiratory illnesses. The admission rates for respiratory disease have decreased for all age groups for Aboriginal children in the Maari Ma region from the 2005/06-2007/08 period to the 2008/09-2012/13 period. However, this trend is not evident for all children in the Maari Ma region or NSW as a whole.

Respiratory illness, average number of admissions to hospital (per year [n]) and rates (per 1,000 population, per year), Maari Ma region and NSW, 2005/06 – 2007/08 & 2008/09 – 2012/13

Year	Age	Maari Ma region				NSW			
		Aboriginal n	Rate	Total n	Rate	Aboriginal n	Rate	Total n	Rate
2005/06- 2007/08	0-4 years	37.0	111.8	94.7	48.3	1,403.0	81.5	23,596.0	56.1
	5-9 years	7.0	20.8	42.3	20.2	307.0	17.3	7,972.0	18.5
	10-14 years	4.0	11.6	22.7	10.2	183.0	10.0	3,677.7	8.2
2008/09- 2012/13	0-4 years	34.6	99.4	92.8	49.7	1,669.2	78.0	24,904.0	54.3
	5-9 years	6.6	19.9	35.4	18.6	355.2	17.4	8,250.8	19.0
	10-14 years	3.4	9.9	21.0	10.9	227.8	11.0	3,954.0	9.0

^asignificantly higher than the current NSW total population result
Source: APDC 2005/06 – 2007/08 & 2008/09 – 2012/13, ABS 2011

Respiratory illness admission rate, Maari Ma region and NSW, 2007/08-2012/13



Source: APDC 2008/09 – 2012/13, ABS Census 2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
0-4 years	-	-	HIGHER
5-9 years	-	-	-
10-14 years	-	-	-

- not significantly different

Australia's Children 2012 says:

Children with a disability can have diverse physical, sensory, intellectual and psychiatric impairments that restrict their full involvement in society.

Information about the prevalence and type of disability among Indigenous children nationally is limited. The 2006 census shows that Indigenous children aged 0-14 were 30% more likely than non-Indigenous children to require assistance with the core activities of self-care, mobility and communication.

We found that:

While no Aboriginal children aged under 5 were identified in the 2011 census as having a disability, there was a similar rate of Aboriginal children and young people aged 5-19 with a disability compared to the NSW Aboriginal population. The rate of Aboriginal children in the Maari Ma region with a disability was almost twice that of the NSW population as a whole.

Disability was identified as a gap in the 2009 profile of child health, development and well-being in far western NSW. National data have been available for a number of years from the ABS Survey of Disability, Ageing and Carers.

The 2006 Census was the first Census to have the variable Core Activity Need for Assistance. The Core Activity Need for Assistance variable has been developed to measure the number of people with a profound or severe disability. As with the ABS Surveys of Disability, Ageing and Carers, the Census of Population and Housing defines the profound or severe disability population as:

- 'those people needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication, because of a long-term health condition (lasting six months or more), a disability (lasting six months or more), or 'old age'.

The table shows the numbers and rates of young people with a disability in the Maari Ma region and in NSW. The rate of disability has increased since the 2006 census, with Aboriginal youth having a greater rate of disability than young people in NSW. The rate of disability is higher in the Aboriginal population in the Maari Ma region for the 5-14 and 15-19 year age groups compared to the total population in the region.

Children and young people (aged 0-19 years) with a profound or severe disability, and rates (per 1,000 population), Maari Ma region and NSW, 2006 and 2011

		Maari Ma region				NSW			
		Aboriginal		Total		Aboriginal		Total	
		N	Rate	N	Rate	N	Rate	N	Rate
0-4 years	2006	0	0.0	24	12.3	241	14.0	3,706	8.8
	2011	0	#0.0	28	15.0	400	18.7	4,604	10.0
5-14 years	2006	24	35.2	87	21.7	1,240	47.8	16,177	18.4
	2011	32	47.9	116	30.4	1,980	48.1	21,785	24.9
15-19 years	2006	3	10.2	25	12.5	402	27.0	6,128	13.9
	2011	18	[†] 52.2	62	32.4	756	39.0	8,377	18.9
TOTAL	2006	27	20.7	136	17.1	1,883	32.4	26,011	15.0
	2011	50	36.7	206	27.1	3,136	38.3	34,766	19.6

[†]significantly higher than the previous period MM-R Aboriginal population result

[#]significantly lower than the current NSW Aboriginal population result

[^]significantly higher than the current NSW total population result

Source: ABS Census 2006 & 2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
0-4 years	-	LOWER	-
5-14 years	-	-	-
15-19 years	HIGHER	-	HIGHER

- not significantly different

Mental health

Australia's Children 2012 says:

Children with mental health problems experience suffering, functional impairment, exposure to stigma and discrimination, and increased risk of premature death.

We found that:

The percentage of 12-17 year olds that experience high levels of psychological distress has decreased from 2005 for far western NSW and NSW as a whole.

The data from the Child and Adolescent Survey which was conducted in 2013, and has mental health indicators, will be available in late 2014 for inclusion in future 'A picture of Australia's children' reports. The data will be included in subsequent publications.

Psychological distress refers to a range of feelings experienced by people who may have identifiable mental health problems such as anxiety or mood disorders, or who may be highly stressed for situational reasons. NSW Health reports that high psychological distress may be associated with poor performance, behavioural problems, and increased rates of alcohol, tobacco, and substance use.

The table shows the percentage of 12-17 year olds in far western NSW¹³ and NSW that have experienced high psychological distress in the six months prior to the NSW School Students Health Behaviours Survey. The data demonstrate that there has been a decrease in the level of psychological distress in 12-17 year old males and females in both far western NSW and NSW as a whole. There were no Aboriginal specific data available.

High psychological distress, youth aged 12-17 years, far western NSW and NSW, 2005 and 2011

		Far western NSW	NSW
Males	2005	24.5%	12.2%
	2011	12.0%	11.0%
Females	2005	23.9%	21.1%
	2011	14.1%	17.0%

Source: NSW School Students Health Behaviours Survey 2005 & 2011

¹³ Refer to the explanation of 'far western NSW' on page II

Part Four: How well are we promoting healthy child development?

Healthy child development helps to prevent disease both in the short and long term, while positive early learning experiences stimulate brain development and improve learning outcomes for children. This chapter focuses on protective factors which promote healthy child development and early learning.

Breastfeeding

Australia's Children 2012 says:

Breastfeeding provides the best nutritional start for infants and promotes their healthy growth and development.

In Australia and internationally, it is recommended that infants be exclusively breastfed up to 6 months of age for optimal health, growth and development.

We found that:

The percentage of women who are breastfeeding at discharge from hospital has increased from the 2006-2007 to the 2007-2011 period.

Infants who have been breastfed have better health outcomes than those who have not, both in early life and beyond, including a reduced risk of Sudden Infant Death Syndrome (SIDS), gastrointestinal and respiratory infections, asthma, otitis media, learning difficulties and behavioural problems.

The National Health and Medical Research Council recommend exclusive breastfeeding¹⁴ for infants in the first six months of life, with breastfeeding to continue, along with the introduction of solid foods, until at least twelve months of age. These guidelines are in accordance with the World Health Organisation's policy on breastfeeding.

As the following table illustrates, the Maari Ma region has a higher proportion of Aboriginal women breastfeeding at the time of discharge from hospital than Aboriginal women in NSW, which is an excellent result. However, the total proportion of women breastfeeding at discharge from hospital is significantly lower in the Maari Ma region compared to NSW as a whole.

Breastfeeding, Maari Ma region and NSW, 2006-2007 and 2007-2011

		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
Breastfeeding at discharge from hospital	2006-2007	68.2%	78.2%	62.8%	81.2%
	2007-2011 ¹⁵	@71.2%	80.2%	67.9%	87.0%

@significantly lower than the current NSW total population result

Source: PNDC 2006/2007 & 2007-2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

¹⁴ Infants who are exclusively breastfed only receive breast milk, along with any medications or vitamins that are required. No other food, drink or supplements are consumed by the child

¹⁵ Babies born at Victorian hospitals whose mother's live in the Maari Ma region are excluded from this data

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Breastfeeding at discharge from hospital	-	-	LOWER

- not significantly different

Dental health

Australia's Children 2012 says:

Good oral health in childhood contributes to better well-being and improved dental outcomes in adulthood – less decay and the loss of fewer natural teeth.

We found that:

Dental health in the Maari Ma region is improving. The number of decayed, missing or filled permanent teeth is decreasing and the proportion with decay is decreasing to match state rates. While the experience for younger children's baby teeth is improving it is still considerably poorer compared to other children in NSW.

Good oral health has positive effects on quality of life, social interactions and self-esteem. Conversely, dental disease can cause pain, discomfort, difficulty sleeping and difficulties in eating which can lead to poor nutrition. Poor oral health is also associated with increased risk of chronic disease later in life.

Local "school kids health check" data gives us a picture of the oral health outcomes of children across the Maari Ma region. Checks in 3 communities in the Maari Ma region were run in 2007 and 2011. In 2007 a total of 218 children, aged 5-15 years, participated. In 2011 there were 180 children who participated.

For many years there have been ongoing visits to all three towns. The visits, staffed by dental therapists and assistants, include clinics and health promotion activities. Recall systems are managed centrally by the oral health team.

Compared to NSW in 2011, the percentage of children with decay in either their baby or permanent teeth varies, with one community much lower but the other two higher. Town C shows a much lower rate of children with decay in their permanent teeth.

The dental team has provided a preventively focussed child dental program in Towns A and C, and the results highlight positive outcomes. The average decay rates in permanent teeth have decreased considerably compared to 2007. This reflects the targeted approach for school aged children.

While there has been little evidenced change in the average number of decayed, missing or filled baby teeth, the percentages of children with decay in baby teeth have decreased in all towns. It is interesting to note that in NSW the total proportion of children with decay in their baby and permanent teeth has increased.

Dental health of children in the Maari Ma region, 2011

		Town A	Town B	Town C	NSW ATSI	NSW TOTAL
Children with decay in baby teeth	2007	67%	77%	90%		31%
	2011	# [↓] 27%	53%	[^] *81%	65%	39%
Children with decay in permanent teeth	2007	60%	37%	56%		23%
	2011	29%	46%	# [↓] 23%	46%	35%
Average number of decayed missing or filled baby teeth (dmft)	2007	3.00	4.07	5.78	2.21	
	2011	[^] 2.50	[^] *5.50	[^] *5.98	3.04	1.53
Average number of decayed missing or filled permanent teeth (DMFT)	2007	1.62	2.00	1.58	0.69	
	2011	#0.75	[^] *1.87	#0.79	1.17	0.74

[↓]significantly lower than the Maari Ma result in the previous period

*significantly higher than the current NSW Aboriginal population result

#significantly lower than the current NSW Aboriginal population result

[^]significantly higher than the current NSW total population result

Source: Maari Ma School Kids Health Checks 2007 & 2011

Statistical significance summary:

We have compared the results for the current 'Town' to the previous period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	'Town' previous	NSW Aboriginal	NSW Total
Baby teeth decay: Town A	LOWER	LOWER	-
Baby teeth decay: Town B	-	-	-
Baby teeth decay: Town C	-	HIGHER	HIGHER
Permanent teeth decay: Town A	-	-	-
Permanent teeth decay: Town B	-	-	-
Permanent teeth decay: Town C	LOWER	LOWER	-
Baby teeth dmft: Town A	-	-	HIGHER
Baby teeth dmft: Town B	-	HIGHER	HIGHER
Baby teeth dmft: Town C	-	HIGHER	HIGHER
Permanent teeth DMFT: Town A	-	LOWER	-
Permanent teeth DMFT: Town B	-	HIGHER	HIGHER
Permanent teeth DMFT: Town C	-	LOWER	-

- not significantly different

Physical activity

Australia's Children 2012 says:

Regular physical activity and good nutrition reduces cardiovascular risk factors, such as overweight, high blood pressure and Type 2 diabetes, and improves the psychosocial well-being of children.

We found that:

The percentage of children in the Maari Ma region that have an adequate level of physical activity is slightly higher than children in NSW as a whole. However, a greater proportion of children in the Maari Ma region have excessive sedentary activity compared to NSW.

It is recommended that children and adolescents have at least 60 minutes of moderate to vigorous physical activity every day. Children are also advised not to spend more than 2 hours per day engaged in sedentary activity, such as watching television, using the computer or using electronic media, such as video game consoles.

It is important to note that the two categories in the table are not mutually exclusive – one could in fact be adequately physically active but also have excessive sedentary behaviour. Here 'adequate physical activity' is measured as 1 hour or more of physical activity outside of school hours each day and 'excessive sedentary activity' is more than 2 hours a day using electronic media for entertainment (for example, computer games, television, or the internet), particularly during daylight hours.

Data from the NSW Child Health Survey show that a slightly larger proportion of children who live in the Maari Ma region engage in adequate physical activity compared to NSW as a whole.

Comparing data from the 2007/08 survey and 2012/13 survey, adequate physical activity has decreased in the Maari Ma region from 33.9% to 27.7%, whereas excessive sedentary activity has decreased from 48.6% to 43.3%. This trend is also apparent in NSW as a whole. There were no Aboriginal specific data available.

Activity levels, children aged 5-15 years, Maari Ma region and NSW, 2007/08 and 2012/13

		Maari Ma region	NSW
Adequate physical activity	2007/08	33.9%	27.3%
	2012/13	27.7%	26.9%
Excessive sedentary activity	2007/08	48.6%	44.7%
	2012/13	43.3%	43.7%

Source: NSW Child Health Survey 2007/08 & 2012/13

Part Five: How well are our children learning and developing?

A child's learning and development is integral to their overall health and well-being, as well as the future productive capacity of society. This chapter focuses in children's development in the primary school years.

Early learning

Australia's Children 2012 says:

The early years are important for the foundations of literacy. Reading to children contributes to the early development of vocabulary and listening comprehension.

We found that:

The proportion of children that are read to daily in the Maari Ma region is lower than NSW.

Read to daily

Reading to children is one of the ways they learn about communication. Improved communication leads to enhanced health and educational outcomes. Reading is an important way to encourage a range of important skills, such as talking and understanding language, imagination, concentration, creativity, listening and problem solving.

The table shows the percentage of children aged 0-5 in the Maari Ma region and NSW that are read to daily. The data illustrate that a greater proportion of children are read to daily in NSW as a whole compared to the Maari Ma region. There were no Aboriginal specific data available.

Children aged 0-5 years read to daily, Maari Ma region and NSW, 2005/06 and 2012/13

		Maari Ma region	NSW
Read to daily	2005/06	70.0%	73.0%
	2012/13	68.6%	76.0%

Source: NSW Child Health Survey 2005/06 & 2012/13

Attending early childhood education programs

Australia's Children 2012 says:

Attendance at high-quality early childhood educational program contributes to optimal child development, including cognitive development and successful transition to primary school.

We found that:

Attendance at child care and pre-school in the Maari Ma region has increased since 2005/06, however the attendance rate is still lower than that of NSW as a whole.

Engaging in early childhood programs assists children to prepare for school, leading to improved educational and health outcomes that are sustained throughout life.

Every child in NSW should have the chance to participate in an early education program before starting school. This commitment is expressed in the NSW Government's plan *NSW 2021: A Plan to Make NSW Number One* and in the National Partnership Agreement on Early Childhood Education. Under the Agreement, by 2013 all children should have access to a preschool program delivered by a university qualified early childhood teacher in accordance with an agreed learning framework, for 15 hours a week, 40 weeks a year before the commencement of formal schooling.

Across NSW, around one in seven children misses out on early education. In some parts of the State, the proportion is far higher. The consequences of this are most significant for children from low-income families, Aboriginal and Torres Strait Islander children, children with disabilities, and children with limited English, including refugee and recently arrived children¹⁶.

¹⁶ NSW Government, Review of NSW Government Funding for Early Childhood Education, 2012, viewed 17 July 2014, https://www.det.nsw.edu.au/media/downloads/about-us/statistics-and-research/public-reviews-and-enquiries/review-of-nsw-government-funding-for-early-childhood-education/review_nsw_gov_funding_ece.pdf

The table shows the percentage of children that have attended playgroup, child care or preschool for the Maari Ma region and NSW. According to the 2012/13 NSW Child Health Survey, a greater proportion of children in NSW attended child care and pre-school compared to the Maari Ma region. The percentages of children that attend child care and pre-school have increased since the 2005/06 survey.

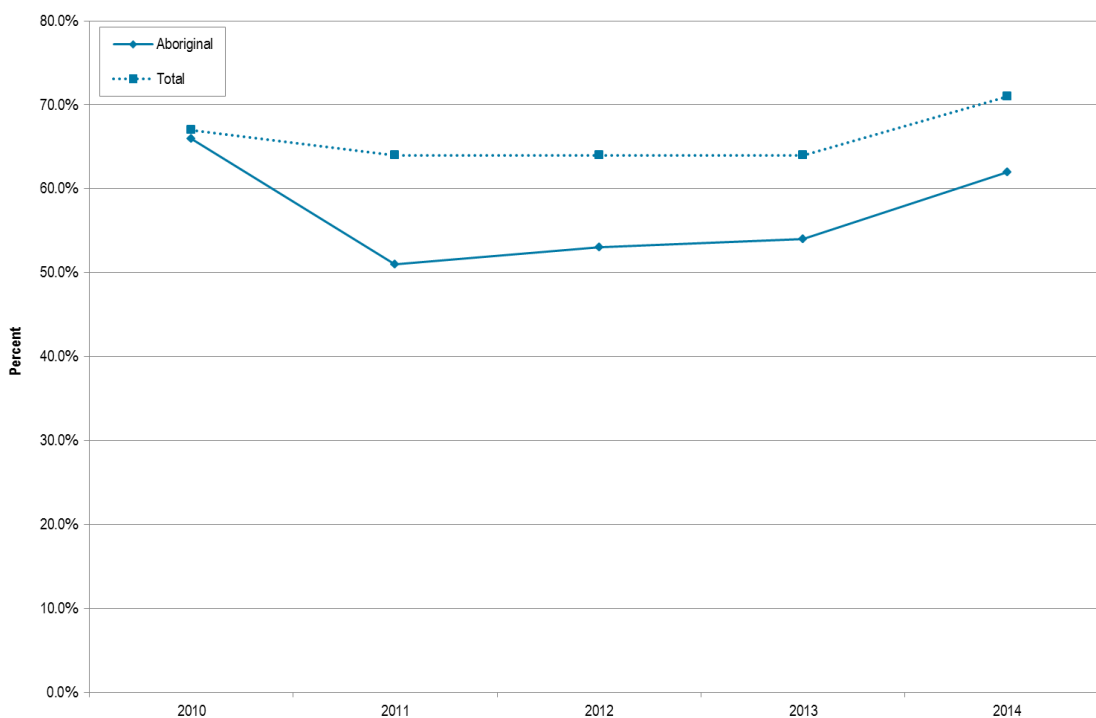
Attendance at child care and pre-school, Maari Ma region and NSW, 2005/06 and 2012/13

		Maari Ma region	NSW
Child care attendance, ever	2005/06	51.0%	47.0%
	2012/13	56.3%	61.9%
Attendance at pre-school	2005/06	74.0%	75.0%
	2012/13	77.8%	88.0%

Source: NSW Child Health Survey 2005/06 & 2012/13

The following graph shows the proportion of children who attended pre-school in the Maari Ma region in 2010-2014. There has been an increase in attendance from 2013 to 2014.

Proportion of children who attended pre-school in the Maari Ma region, 2010-2014



Source: NSW Department of Education & Communities 2010-2014

School participation

Australia's Children 2012 says:

Regular attendance and participation in schooling is an important factor in educational and life success, and is a key national education goal.

We found that:

Attendance rates are lower for Aboriginal children in the Maari Ma region and in NSW compared to the total populations. The attendance rate in the Maari Ma region as well as NSW decreases when children enter secondary school. However the rates then increase from Year 10 to 12.

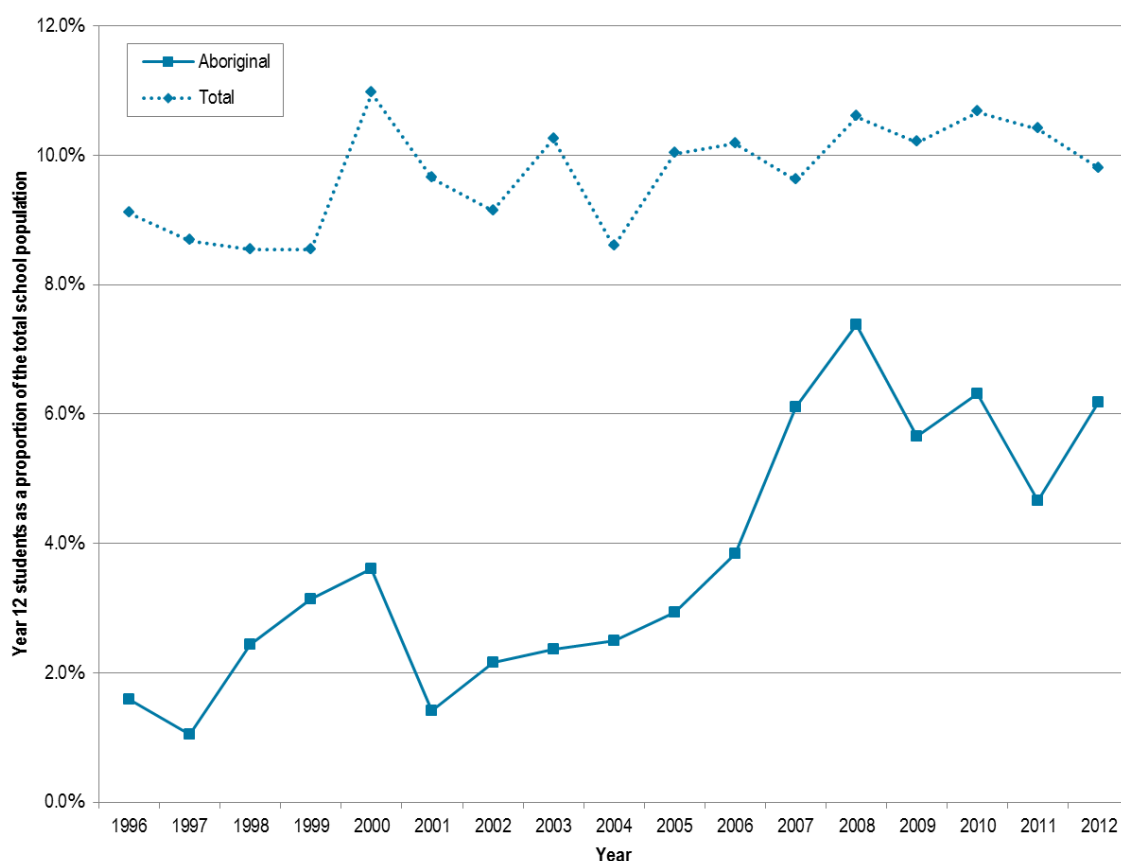
Enrolment in Year 12

As previously mentioned in Part Two of this profile, education is an extremely important determinant of health. The level of education is associated with most lifestyle behaviours and health outcomes, from low birth weight and child death rates to rates of diabetes, heart disease and cancer.

The following graph illustrates the proportion of Aboriginal students, as well as the total proportion of students enrolling in Year 12 studies over the last 16 years in the Maari Ma region.

The graph illustrates that there is an increased proportion of Aboriginal students enrolling in Year 12 studies in the Maari Ma region. The fluctuations observed are most likely due to small numbers. This should be taken into consideration when interpreting results.

Students enrolled in Year 12 at a public school in the Maari Ma region as a proportion of the total school population in the Maari Ma region, 1996-2012



Source: NSW Department of Education & Communities 1996-2012

Attendance K-12

The attendance rates for students in public primary schools and public secondary schools are presented in the table. The data shows that attendance decreases in secondary school, with less Aboriginal children attending primary school and secondary school in the Maari Ma region compared to NSW. The total attendance rate for students is slightly lower in the Maari Ma region compared to NSW as a whole.

School attendance rates, K-12, Maari Ma region and NSW, 2012

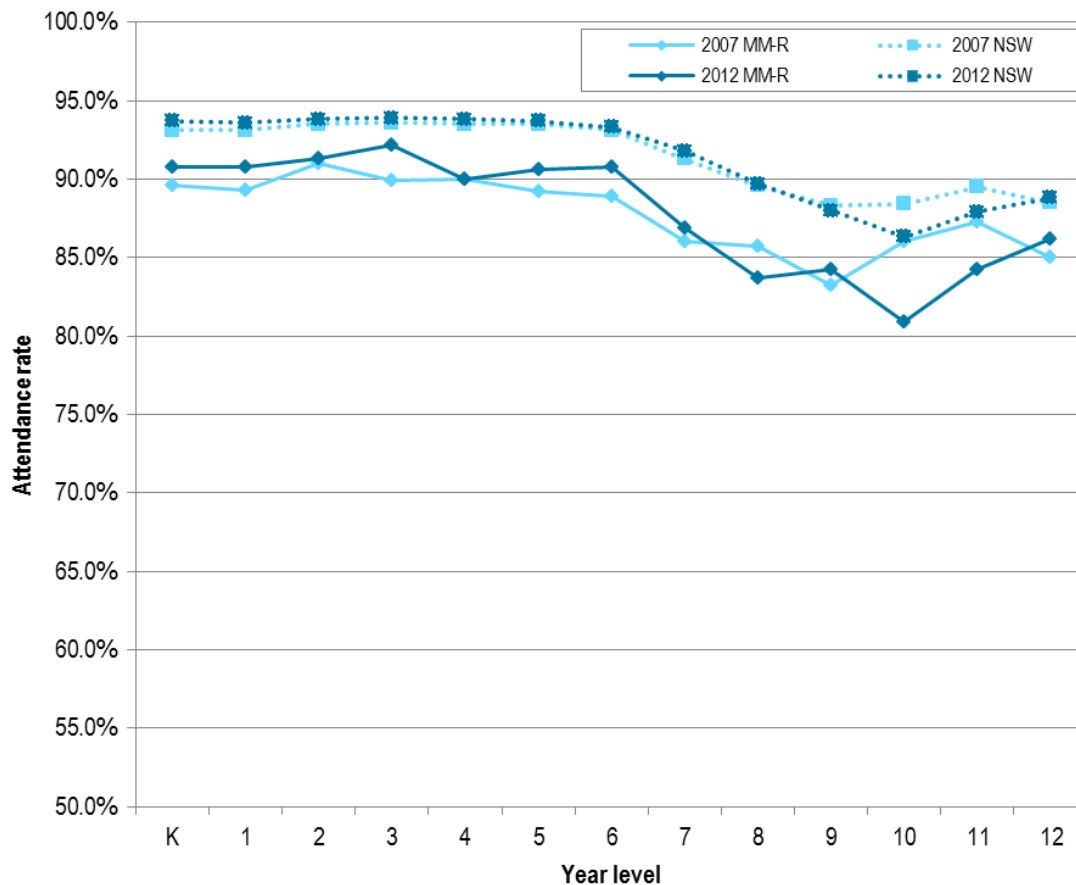
	Maari Ma region		NSW	
	Aboriginal	Total	Aboriginal	Total
Primary school	85.5%	91.1%	89.2%	93.7%
Secondary school	72.1%	83.8%	78.2%	88.6%

Source: NSW Department of Education & Communities 2012

The chart illustrates the school attendance rates for K-12 in the Maari Ma region and NSW. School attendance rates in the Maari Ma region are lower across every year level of schooling when compared to NSW. The attendance rates decrease by up to 5% per year level as students move from Year 6 to Year 9. However, improvement in attendance rates occurs from Year 10 to Year 12 for both the Maari Ma region and NSW.

The overall trend in attendance rates mirrors the NSW figures across every year level of schooling, albeit at a rate of approximately 5% less.

School attendance rates, Maari Ma region and NSW, 2007 & 2012



Source: NSW Department of Education & Communities 2007 & 2012

Retention Year 10-12

In January 2010, new legislation was passed which stated that all NSW students must complete Year 10. Under the new arrangements, once students have completed Year 10 there are a number of options from which to choose. After year 10 and until the age of 17, students must be:

- ⦿ in school, or registered for home schooling or
- ⦿ in approved education or training or
- ⦿ in full-time, paid employment (average 25 hours/week) or
- ⦿ in a combination of these¹⁷.

¹⁷NSW Government, *New school leaving age: information for parents and secondary school students*, 2009, viewed 2 December 2014
<http://www.schools.nsw.edu.au/media/downloads/schoolsweb/leavingschool/schoolleaving/stuinfo sheet.pdf>

The table shows retention for students in the Maari Ma region and in NSW. The percentage of Aboriginal students in the Maari Ma region that went on to complete their Year 12 Higher School Certificate has doubled since 2007. When comparing Aboriginal students in the Maari Ma region to Aboriginal students in NSW, NSW has a higher percentage of Aboriginal students that finish Year 12.

Students enrolled in Year 10 that completed their Year 12 Higher School Certificate, Maari Ma region and NSW, 2007 and 2013

		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
Students	2007	18.4%	54.2%	37.8%	69.9%
	2013	@†40.5%	58.1%	48.1%	74.3%

†significantly higher than the previous period MM-R Aboriginal population result

@significantly lower than the current NSW total population result

Source: NSW Department of Education & Communities 2007 & 2013

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Students	HIGHER	-	LOWER

- not significantly different

Transition to primary school

Australia's Children 2012 says:

Children entering school with basic skills for life and learning have higher levels of social competence and academic achievement, increasing their likelihood of achieving their full potential.

We found that:

Children in the Maari Ma region have higher levels of developmental vulnerability and are 'at risk' on every domain listed in the Australian Early Development Census, when compared to children in NSW.

The 2012 Best Start data indicate that more Aboriginal children in the Maari Ma region have a low literacy capability at the beginning of their first year at school when compared to all children in the region.

Children experience greater success at school when they have developed the emotional capability to manage their feelings and behaviour and when they have a base of strong academic and social skills.

Australian Early Development Census

The Australian Early Development Census (AEDC) is a measure of how young children are developing in different communities. Like a census, it involves collecting information to help create a snapshot of early childhood development across Australia. The AEDC is a population measure of children's development as they enter school. Based on the scores from a teacher-completed checklist, the AEDC measures five areas, or domains, of early childhood development:

- ⦿ physical health and well-being
- ⦿ social competence
- ⦿ emotional maturity
- ⦿ language and cognitive skills (school-based) and
- ⦿ communication skills and knowledge.

The first data set was collected in 2009 and the process was repeated in 2012. Children in their first year of schooling are eligible for inclusion in the AEDC, including those who are enrolled at government, catholic and independent schools.

The tables provide information, by domain, on vulnerable and at risk children in the Maari Ma region and in NSW, based on the following classification system:

- ◉ *Developmentally vulnerable* - children who demonstrate a much lower than average ability in the developmental competencies measured in the AEDC domains. These children are those whose results fall in the lowest 10th percentile.
- ◉ *Developmentally 'at risk'* - children who have scores at the lower end of the scale, between the 10th and 25th percentile.
- ◉ *Developmentally 'on track'* - children whose results fall in the top 75th percentile.

Aboriginal children in the Maari Ma region have higher levels of developmental vulnerability on every indicator compared to children in NSW for both 2009 and 2012. Developmental vulnerability has increased on every AEDC domain for children in the Maari Ma region since 2009, whereas it has decreased for the NSW population.

The 2012 results for the Maari Ma Aboriginal population is statistically significantly higher for all domains compared to both the NSW Aboriginal and NSW total populations.

Children considered developmentally vulnerable, by AEDC domains, Maari Ma region and NSW, 2009 and 2012¹⁸

AEDC domain		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
Physical health and well-being	2009	26.9%	14.4%	-	8.6%
	2012	[^] *27.3%	15.3%	17.7%	8.3%
Social competence	2009	19.4%	11.6%	-	8.8%
	2012	[^] *28.6%	13.9%	16.9%	8.5%
Emotional maturity	2009	14.9%	10.0%	-	7.4%
	2012	[^] *20.8%	11.0%	12.9%	6.2%
Language and cognitive skills	2009	36.9%	10.0%	-	5.9%
	2012	[^] *24.7%	10.9%	14.8%	4.8%
Communication skills and general knowledge	2009	23.9%	11.1%	-	9.2%
	2012	[^] *27.3%	15.3%	16.5%	8.5%

*significantly higher than the current NSW Aboriginal population result

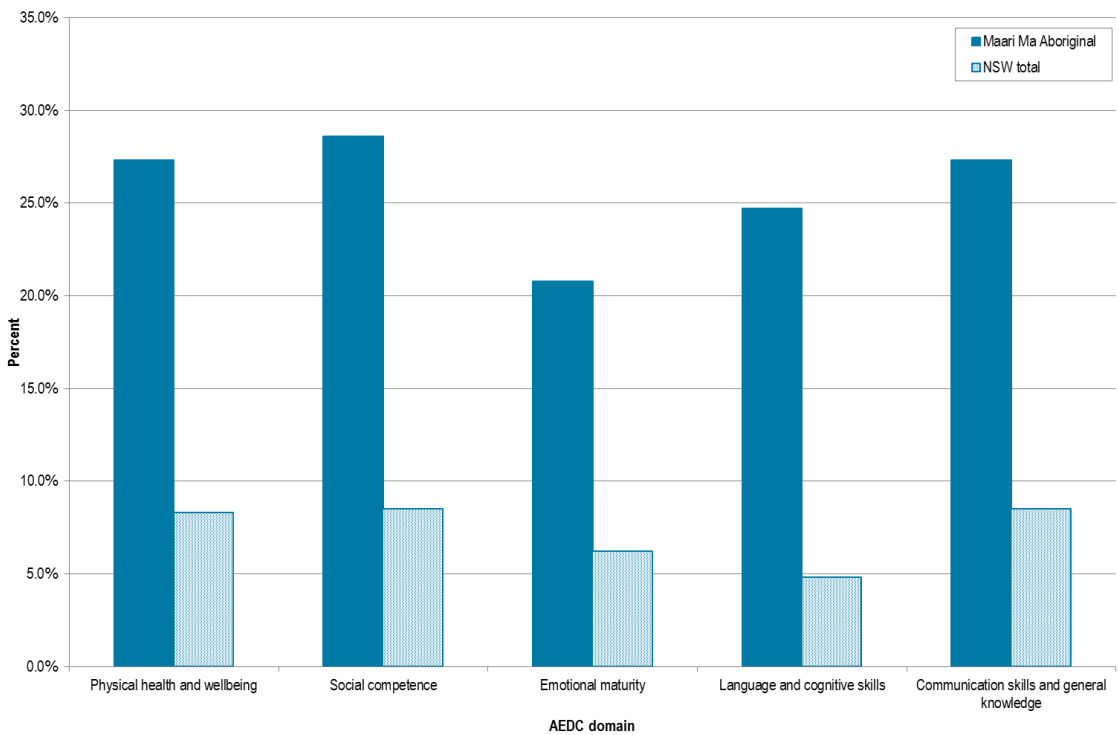
[^]significantly higher than the current NSW total population result

- data unavailable

Source: Australian Early Development Census 2009 & 2012

¹⁸ It is important to be cautious when interpreting change particularly if the number of children in the groups being compared is small. It should be noted that these communities have very small cohorts (i.e. all children) and particularly so for Aboriginal children. Whilst this data is still valuable, the results from larger sized communities provide more robust data.

Children considered developmentally vulnerable, by AEDC domains, Maari Ma region and NSW, 2012



Source: Australian Early Development Census 2012

Children in the Maari Ma region are similarly ‘at risk’ on AEDC indicators, when compared to children in NSW. The percentage of all children ‘at risk’ has increased for some of the domains in the Maari Ma region since 2009. The results for the Aboriginal children in the Maari region are statistically significantly higher for one of the domains (language and cognitive skills) compared to the current NSW Aboriginal population and for four of the five domains compared to the total NSW population.

Children considered 'at risk', by AEDC domains, Maari Ma region and NSW, 2009 and 2012¹⁹

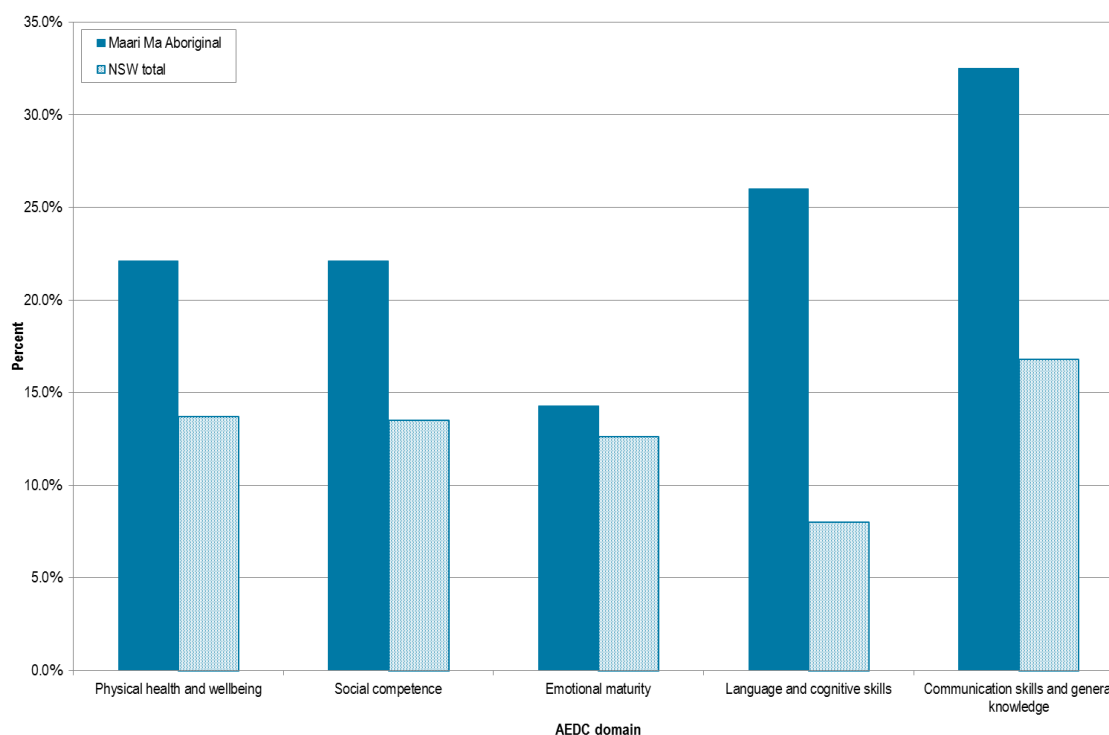
AEDC domain		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
Physical health and well-being	2009	17.9%	11.6%		12.9%
	2012	[^] 22.1%	18.4%	17.3%	13.7%
Social competence	2009	31.3%	15.4%		14.1%
	2012	[^] 22.1%	18.5%	19.3%	13.5%
Emotional maturity	2009	23.9%	15.6%		14.3%
	2012	14.3%	19.5%	17.1%	12.6%
Language and cognitive skills	2009	26.2%	11.9%		9.5%
	2012	^{^*} 26.0%	17.4%	16.6%	8.0%
Communication skills and general knowledge	2009	25.4%	14.1%		15.8%
	2012	[^] 32.5%	22.3%	23.2%	16.8%

*significantly higher than the current NSW Aboriginal population result

[^]significantly higher than the current NSW total population result

Source: Australian Early Development Census 2009 & 2012

Children considered 'at risk', by AEDC domains, Maari Ma region and NSW, 2012



Source: Australian Early Development Census 2012

¹⁹ It is important to be cautious when interpreting change particularly if the number of children in the groups being compared is small. It should be noted that these communities have very small cohorts (i.e. all children) and particularly so for Aboriginal children. Whilst this data is still valuable, the results from larger sized communities provide more robust data.

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Developmentally vulnerable: Physical health and well-being	-	HIGHER	HIGHER
Developmentally vulnerable: Social competence	-	HIGHER	HIGHER
Developmentally vulnerable: Emotional maturity	-	HIGHER	HIGHER
Developmentally vulnerable: Language and cognitive skills	-	HIGHER	HIGHER
Developmentally vulnerable: Communication skills and general knowledge	-	HIGHER	HIGHER
At risk: Physical health and well-being	-	-	HIGHER
At risk: Social competence	-	-	HIGHER
At risk: Emotional maturity	-	-	-
At risk: Language and cognitive skills	-	HIGHER	HIGHER
At risk: Communication skills and general knowledge	-	-	HIGHER

- not significantly different

The Best Start Kindergarten Assessment is a standardised set of observations that teachers can use as a guide in the Kindergarten year. It is a process where the child's teacher observes and records what the child already knows and can do in literacy and numeracy and uses the information to guide future teaching practices.

At the beginning of 2008 the Best Start Kindergarten Assessment was implemented at 400 NSW schools, with a further 600 implementing the program in 2009 and all 1,700 public primary schools participating by 2010.

At school entry the majority of children are expected to be in Clusters 1 and 2. Children with higher literacy capability are likely to be in Cluster 2, and those with exceptional literacy capability in Clusters 3 or 4.

The 2012 data for the Maari Ma region demonstrate that the majority of Kindergarten students were in Cluster 1, indicating that they had a low literacy capability at the beginning of their first year at school. A higher percentage of Aboriginal children were in Cluster 1 than total children, a lower proportion in Clusters 2 and 3 and none in Cluster 4.

Best Start, indicating level of literacy attainment prior to school, Maari Ma region, 2012

	Cluster 1		Cluster 2		Cluster 3		Cluster 4	
	Aboriginal	Total	Aboriginal	Total	Aboriginal	Total	Aboriginal	Total
Reading texts	82.1%	76.5%	17.9%	22.4%	0.0%	0.5%	0.0%	0.5%
Comprehension	76.2%	60.9%	21.4%	36.1%	2.4%	2.7%	0.0%	0.3%
Aspects of writing	92.9%	89.0%	7.1%	11.0%	0.0%	0.0%	0.0%	0.0%
Aspects of speaking	63.1%	46.4%	32.1%	44.0%	4.8%	8.2%	0.0%	1.4%
Phonics	76.2%	70.5%	21.4%	25.4%	2.4%	3.3%	0.0%	0.8%
Phonemic awareness	86.9%	68.3%	13.1%	21.4%	0.0%	5.2%	0.0%	0.8%
Concepts about print	79.8%	80.1%	20.2%	18.6%	0.0%	0.8%	0.0%	0.5%

Source: NSW Department of Education & Communities 2012

Literacy and numeracy²⁰

Australia's Children 2012 says:

Literacy and numeracy skills enable children to engage in learning and ultimately to fully participate in society and lead productive lives.

We found that:

The percentage of children (Aboriginal and total) in the Maari Ma region that are below the national minimum standard for reading, writing and numeracy is at least double that of NSW.

The National Assessment Program – Literacy and Numeracy (NAPLAN) tests have been developed collaboratively by the states, territories, Australian government and non-government schools sectors. Students across the nation were tested in the same year level, on the same items in reading, writing, language conventions (spelling, grammar and punctuation) and numeracy.

The NAPLAN results provide useful information for teachers, parents and children – teachers and schools are able to identify areas of strength and where further assistance may be required.

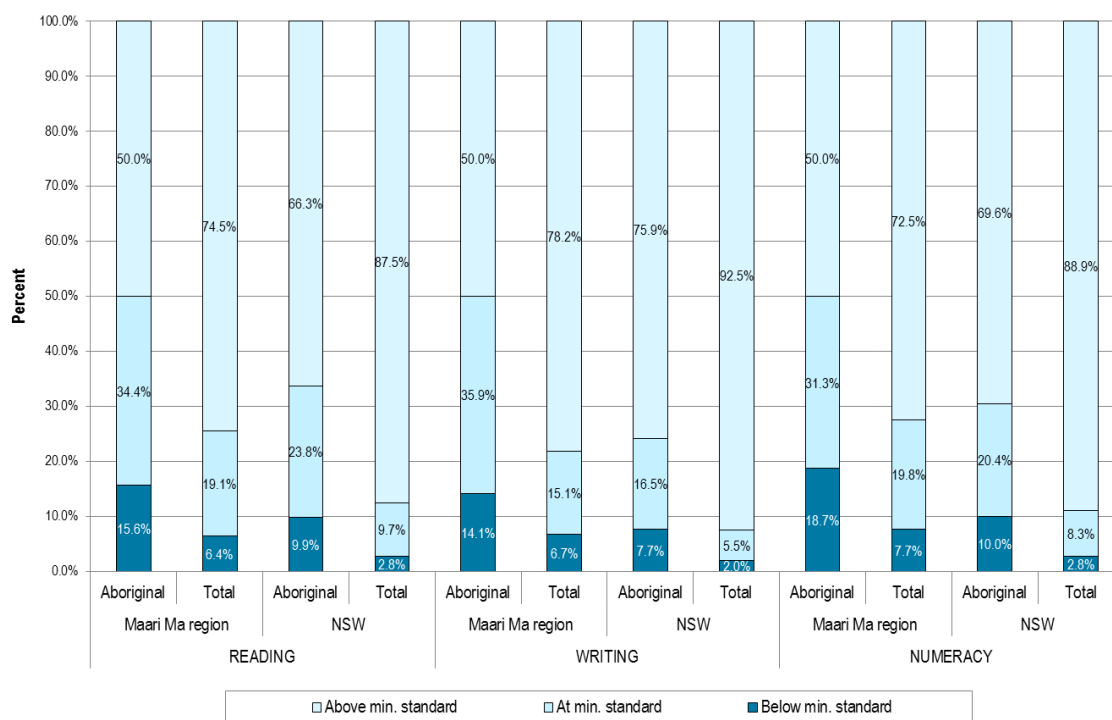
The following charts show children in the Maari Ma region, compared to NSW, at Years 3, 5, 7 and 9, and their performance on the reading, writing and numeracy tests.

Previously, the NAPLAN tested children's skills in literacy and numeracy. Literacy has now been divided into reading, writing and language conventions. Therefore, the 2007 NAPLAN data cannot be compared to the 2013 NAPLAN data.

One quarter or more of children in the Maari Ma region (Aboriginal and total) in Years 5, 7 and 9 were below the national minimum standard for writing.

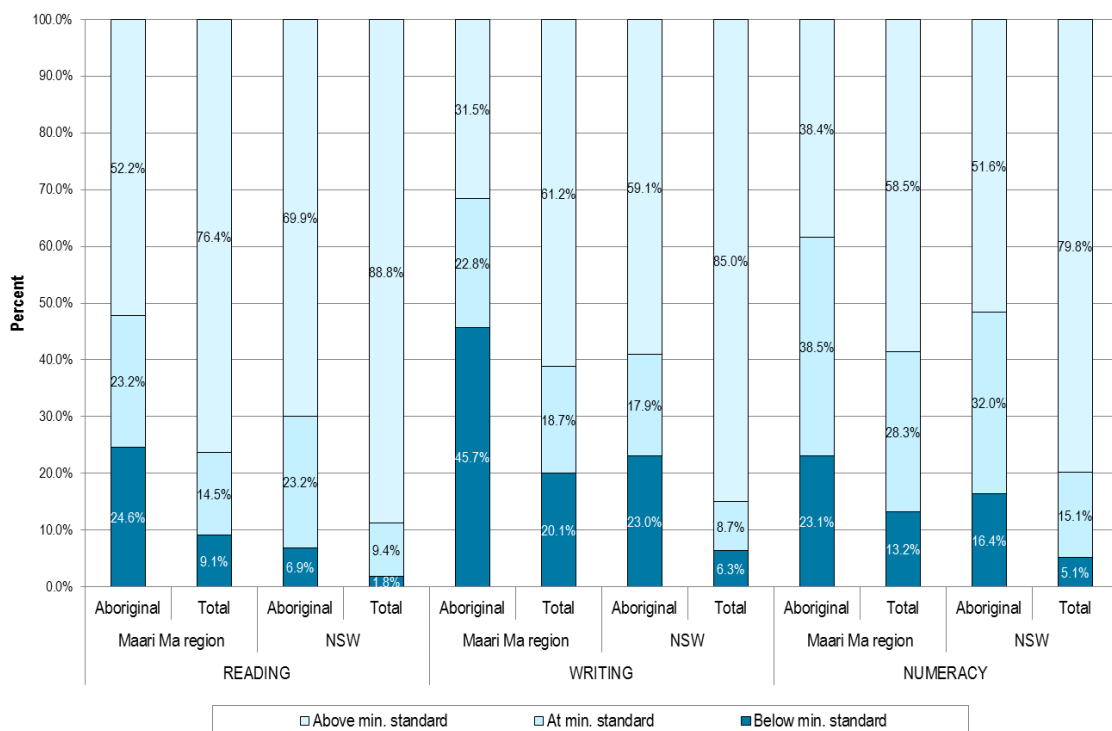
²⁰ Data from schools in Balranald local government area could not be sourced and therefore are not included in this part of the report

Performance on Year 3 NAPLAN tests, reading, writing and numeracy, Maari Ma region and NSW, 2013



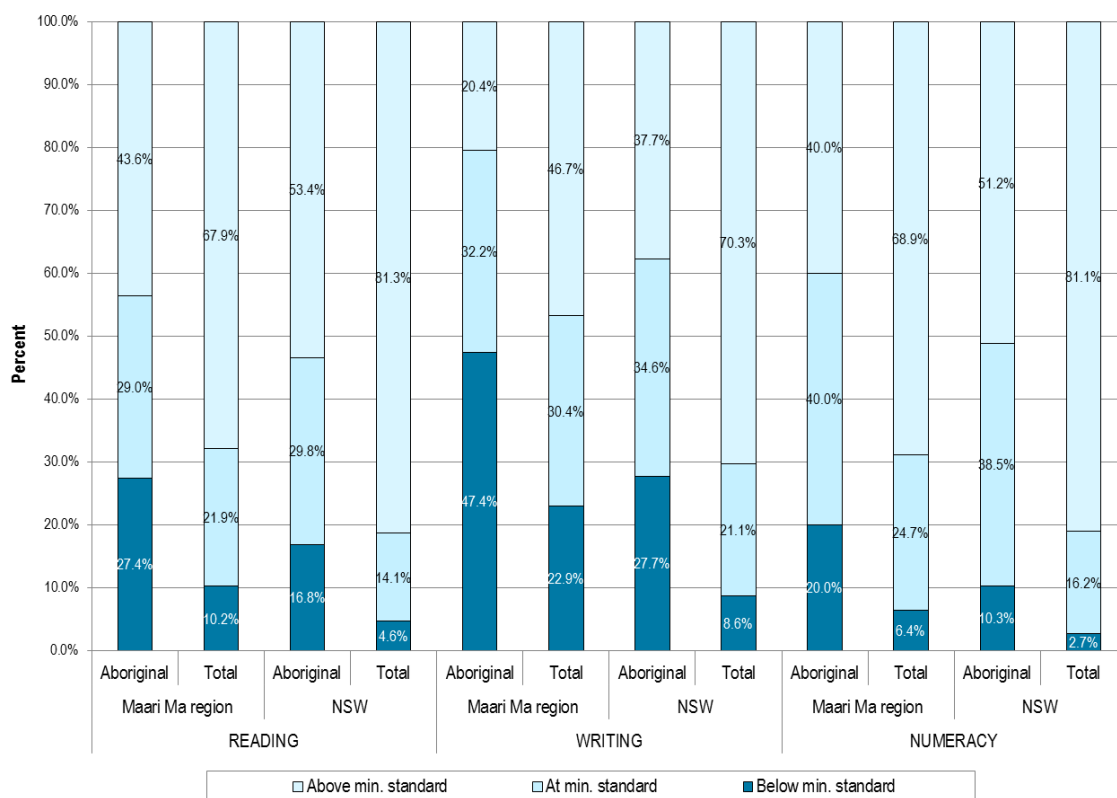
Source: NSW Department of Education & Communities 2013

Performance on Year 5 NAPLAN tests, reading, writing and numeracy, Maari Ma region and NSW, 2013



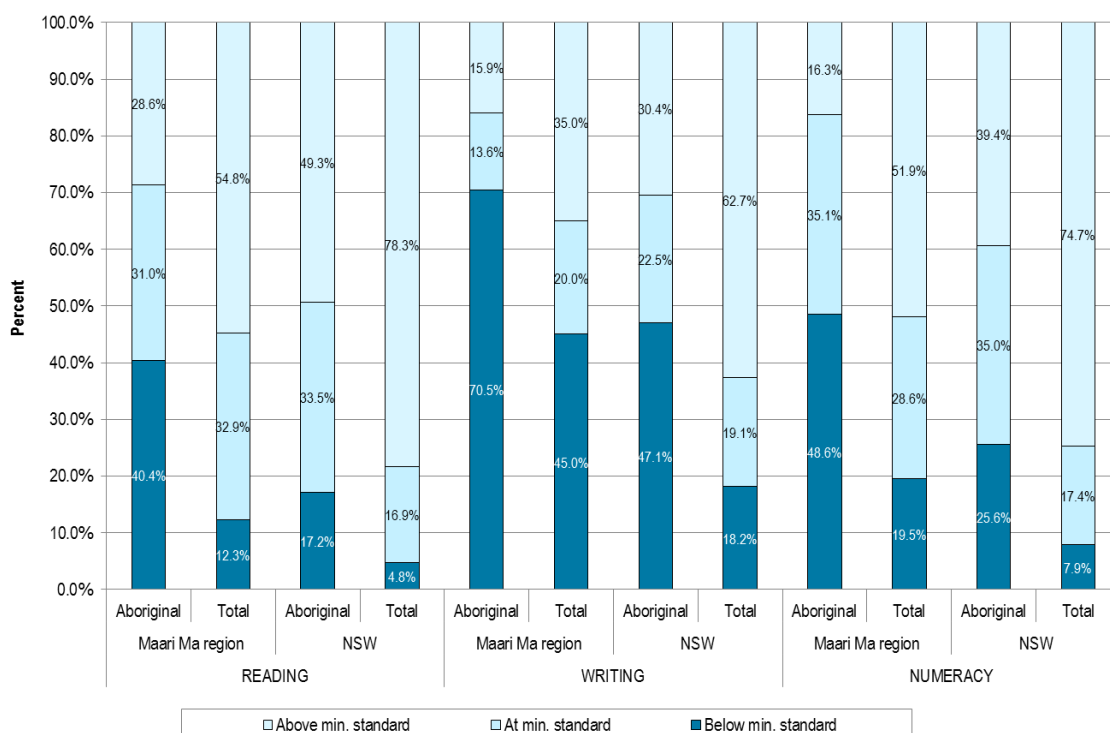
Source: NSW Department of Education & Communities 2013

Performance on Year 7 NAPLAN tests, reading, writing and numeracy, Maari Ma region and NSW, 2013



Source: NSW Department of Education & Communities 2013

Performance on Year 9 NAPLAN tests, reading, writing and numeracy, Maari Ma region and NSW, 2013



Source: NSW Department of Education & Communities 2013

Part Six:

What factors can affect children adversely?

Because childhood, including the perinatal period, is a time of rapid development, it is critical to reduce the factors that adversely affect the health of children. This chapter focuses on factors which increase the risk of poor outcomes for children.

During the antenatal period

Australia's Children 2012 says:

Teenage motherhood poses significant long-term risks for both mother and child, including poorer health, educational and economic outcomes.

Smoking in pregnancy is an important modifiable risk factor for low birth weight, pre-term birth, placental complications and perinatal mortality.

Maternal alcohol use during pregnancy is associated with severe adverse perinatal outcomes, such as foetal alcohol syndrome, alcohol-related birth defects and alcohol-related neurodevelopmental disorders.

Babies who are born with low birth weight are at greater risk of poor health, disability and death than other babies.

We found that:

The percentage of Aboriginal women who smoke during pregnancy, as well as the number of cigarettes smoked has significantly decreased since the 2003-2007 period. However, the figures are still higher for Aboriginal women in the Maari Ma region compared to NSW as a whole.

The proportion of teenage mothers, low birth weight babies and premature babies is significantly higher for the Aboriginal population in the Maari Ma region compared to NSW as a whole.

The fertility rate has increased for Aboriginal women in the Maari Ma region aged 25-44 years. Aboriginal women aged 15-24 years of age have a higher fertility rate when compared to NSW Aboriginal women and the total population of women in NSW.

Various factors can impact on the health and development of infants and young children, including being born to a teenage mother or having a mother who smoked cigarettes, drank alcohol or used other drugs during pregnancy. Babies born prematurely or with a low birth weight also have a greater risk of poorer health and social outcomes than other babies.

First antenatal visit

The table shows the proportion of women who have had their first antenatal visit before 20 weeks in the Maari Ma region and in NSW.

When comparing the proportion of women who have their first antenatal visit before 20 weeks, the Aboriginal women in the Maari Ma region fair well, but while the proportion has increased it is still significantly lower than the proportion across all NSW.

First antenatal visit prior to 20 weeks gestation, Maari Ma region and NSW, 2003-2011

		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
First antenatal visit before 20 weeks	2003-2007	76.1%	81.2%	79.2%	89.7%
	2007-2011	@77.8%	88.6%	81.4%	90.9%

@significantly lower than the current NSW total population result

Source: PNDC 2003-2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
First antenatal visit before 20 weeks	-	-	LOWER

- not significantly different

Factors that influence pregnancy and birth

The table includes a number of indicators that can affect the development of babies in utero.

Teenage motherhood, particularly at younger ages, can pose significant long-term risks to both mother and child. Teenage mothers are more likely to delay having their pregnancy confirmed and/or seeking antenatal care, and are more likely to engage in risky behaviour, including smoking, drinking alcohol or taking drugs during pregnancy. Consequently teenage mothers face increased risk of miscarriage, preterm delivery, low birth weight and other complications, including higher rates of perinatal mortality.

Parenthood during the teenage years often results in interrupted schooling, a higher risk of single parenthood, greater dependence on government assistance, increased problems in engaging with the labour market, and poverty. All of these factors can affect the health, education and economic futures of children born to teenage parents.

Birth weight is an important indicator of the baby's chance of survival and good health. Low birth weight increases the probability of lengthy hospitalisation after birth, the need for resuscitation, or death, and is a risk factor for neurological and physical disabilities. The proportion of Aboriginal babies in the Maari Ma region that have a low birth weight is double that of the total proportion of babies, both in the Maari Ma region and in NSW as a whole.

Smoking during pregnancy not only impacts on the health of the mother, but also increases the risk of ill health for her unborn baby, including pre-term birth, SIDS, otitis media, asthma, behavioural problems and reduced intelligence.

The use of alcohol during pregnancy can cause serious health effects for the unborn baby, the most serious being Foetal Alcohol Syndrome (includes poorer growth, delayed development, behaviour problems and reduced intelligence).

The proportion of Aboriginal teenage mothers in the Maari Ma region was similar to NSW Aboriginal teenage mothers, however was significantly higher than NSW as a whole. The 2007-2011 figures aren't significantly different to the 2003-2007 figures.

Smoking rates during pregnancy are higher in the Maari Ma region than NSW as a whole. Both the rates of smoking during pregnancy (for both the Aboriginal and total population) and the quantity smoked (again for both the Aboriginal and total populations) were significantly higher in far western NSW compared to NSW. However, the percentage of women who smoke during pregnancy has decreased significantly for the Maari Ma region from the 2003-2007 to the 2007-2011 period. Significant improvements in infants and children's health are possible with a reduction in smoking in pregnancy.

Using ABCD data, the proportion of women in the Maari Ma region who have documentation in their maternal health files relating to drinking alcohol in the first and third trimesters is not significantly different to other ABCD sites. However, the 2013 national ABCD figure for alcohol use during the third trimester is lower than the 2008 comparative rate. Data for NSW were not available.

Factors that affect children adversely, Maari Ma region and NSW, 2003-2007 and 2007-2011²¹

		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
Proportion of births to women aged 10-19 years ²²	2003-2007	22.1%	10.3%	24.5%	4.7%
	2007-2011	[^] 21.6%	9.3%	19.2%	3.4%
Low birth weight ²² (<2500 grams)	2003-2007	11.3%	5.1%	12.6%	6.4%
	2007-2011	[^] 13.1%	6.0%	11.8%	6.2%
Prematurity ²² (<37 weeks gestation)	2003-2007	8.0%	7.0%	11.9%	7.3%
	2007-2011	[^] 12.2%	7.4%	12.2%	7.5%
Smoking during pregnancy	2003-2007	77.9%	38.8%	63.2%	18.9%
	2007-2011	[^] [*] ↓66.2%	21.3%	50.4%	11.9%
More than 10 cigarettes per day	2003-2007	64.8%	57.6%	54.3%	46.4%
	2007-2011	[^] [*] ↓53.7%	46.4%	39.2%	29.9%

[↓]significantly lower than the previous period MM-R Aboriginal population result

^{*}significantly higher than the current NSW Aboriginal population result

[@]significantly lower than the current NSW total population result

[^]significantly higher than the current NSW total population

Source: PNDC 2003-2011

²¹ Data extraction covers same period (2007)

²² Included in these data are 675 babies born in Victorian hospitals to women who reside in the Maari Ma region

Alcohol use during pregnancy, Maari Ma region and All ABCD Sites, 2008 and 2013

		Maari Ma region	All ABCD sites
Alcohol use during the first trimester	2008 ²³	18.0%	19.0%
	2013 ²⁴	17.0%	14.0%
Alcohol use during the third trimester	2008 ²³	18.0%	14.0%
	2013 ²⁴	12.0%	7.0%

Source: ABCD 2008 & 2013

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Proportion of births to women aged 10-19 years	-	-	HIGHER
Low birth weight (<2500 grams)	-	-	HIGHER
Prematurity (<37 weeks gestation)	-	-	HIGHER
Smoking during pregnancy	LOWER	HIGHER	HIGHER
More than 10 cigarettes per day	LOWER	HIGHER	HIGHER

- not significantly different

There was no statistically significant difference for alcohol consumption between the current Maari Ma period result compared with the previous Maari Ma period result and the current ABCD total population result.

²³ Maari Ma data from 53 audits of antenatal files across the region compared to national data where 80 antenatal file audits were done in Central Australia, Far North Queensland, Western Australian, Far West NSW and the Top End of the Northern Territory

²⁴ Maari Ma data from 47 audits of antenatal files across the region compared to national data where 654 antenatal file audits were done in Central Australia, Far North Queensland, Western Australian, Far West NSW and the Top End of the Northern Territory

Fertility rate

Fertility rate refers to the number of children per 1,000 women aged 15-44. Although the majority of teenage births occur between 15-19 years of age, a small proportion of births do occur between 10-14 years of age and we have included those data.

The fertility rate is influenced by the age of the mother. The following table shows the fertility rate by age group for Aboriginal and all women in the Maari Ma region in different age groups. The fertility rate for Aboriginal women in the Maari Ma region is 72 per 1000 women. This is significantly higher than the NSW total fertility rate (58 per 1000 women).

When comparing the rates from the 2003-2007 period to the 2007-2011 period, it is interesting to note that the fertility rate for 15-19 year olds, 20-24 year olds and 25-44 year olds in the Maari Ma region has increased for the total population of women in those age categories.

Fertility rate (per 1,000 live births, per year) by age, Maari Ma region and NSW, 2003-2007 and 2007-2011

Mother's age		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
10-14 years	2003-2007	1.1	0.4	0.8	0.1
	2007-2011	0.0	0.2	0.7	0.1
15-19 years	2003-2007	60.4	28.4	69.5	15.3
	2007-2011	^{^*} 74.0	48.4	58.5	14.8
20-24 years	2003-2007	154.0	95.7	143.9	59.2
	2007-2011	^{^*} 207.1	139.2	139.6	56.8
25-44 years	2003-2007	48.1	44.6	65.1	77.8
	2007-2011	[↑] 72.1	82.7	65.4	80.5
TOTAL	2003-2007	53.1	40.6	62.0	56.2
	2007-2011	^{^*} [↑] 122.0	116.7	112.3	112.8

[↑]significantly higher than the previous period MM-R Aboriginal result

^{*}significantly higher than the current NSW Aboriginal population result

[^]significantly higher than the current NSW total population result

Source: PNDC 2003-2011, ABS 2006 & 2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
10-14 years	-	-	-
15-19 years	-	HIGHER	HIGHER
20-24 years	-	HIGHER	HIGHER
25-44 years	HIGHER	-	-
TOTAL	HIGHER	HIGHER	HIGHER

- not significantly different

Overweight and obesity

Australia's Children 2012 says:

Overweight and obese children are at risk of serious health conditions in both the short and long term, such as asthma, cardiovascular conditions and Type 2 diabetes.

We found that:

A greater proportion of children in the Maari Ma region are overweight or obese compared to NSW.

Children who are overweight are at risk of future physical health problems, including diabetes, sleep apnoea, respiratory difficulties and orthopaedic problems. Social health problems, including schoolyard bullying, are also a concern for overweight children.

Children and adolescents need at least 60 minutes (and up to several hours) of moderate to vigorous physical activity every day. Moderate activities include brisk walking, bike riding, skateboarding and dancing. Vigorous activities include football, netball, soccer, running, swimming laps, or training for sport and are those activities that make you 'huff and puff'.

The table shows the proportion of children who are overweight or obese in the Maari Ma region and in NSW. The data demonstrate that the Maari Ma region has a higher percentage of children that are overweight or obese compared to NSW.

Percentage of children who are overweight or obese, Maari Ma region and NSW, 2012/13

		Maari Ma region	NSW
Overweight/or obese	2012/13	44.7%	30.6%

Source: NSW Ministry of Health 2012/13

For 2012/13 there were no Aboriginal specific data. Data presented in the previous profile were not able to be replicated, hence it is not able to be compared.

Environmental tobacco smoke

Australia's Children 2012 says:

Exposure to tobacco smoke puts children at risk of serious health problems including asthma, respiratory tract infections, and SIDS.

We found that:

Fewer families in the Maari Ma region have smoke-free homes and cars compared to families in NSW.

Young and unborn children who are exposed to tobacco smoke are at risk of serious health problems including increased risk and severity of asthma, infections of the lower respiratory tract, low birth weight, middle ear infections and SIDS.

The 2012/13 NSW Child Health Survey reports that 90.1% of families in the Maari Ma region have smoke free homes and 94.5% have smoke free cars. These figures are a little lower than the respective NSW figures of 97.5% and 97.3%. There is an improvement in the proportion of smoke free cars in the Maari Ma region between the two time periods. Aboriginal specific data were not available.

Percentage of families with children aged 0-15 with smoke-free homes and cars, Maari Ma region and NSW, 2005/06 and 2012/13

		Maari Ma region	NSW
Smoke-free homes	2005/06	90.0%	91.0%
	2012/13	90.1%	97.5%
Smoke-free cars	2005/06	89.0%	92.0%
	2012/13	94.5%	97.3%

Source: NSW Child Health Survey 2005/06 & 2012/13

Substance use

Australia's Children 2012 says:

Alcohol use at young ages is associated with more frequent use during late adolescence and an increased risk of later dependence.

Tobacco smoking is the leading cause of preventable death in the world today. Tobacco use at a young age is a key predictor of continued smoking in adulthood.

We found that:

A greater proportion of males in far western NSW consumed alcohol and/or used tobacco in 2011 compared to 2005. Alcohol use and tobacco use has decreased in NSW since 2005.

Misuse of alcohol and use of other drugs (including tobacco) by young people can cause immediate and long-term health and social problems. In the short term, it may result in hospitalisations due to acute intoxication and related injuries, dependence and withdrawal symptoms. In the long-term, alcohol and other drug use can lead to depression, infections with blood-borne diseases, damage to the liver, heart and brain, and increased risk of cancers and other serious health conditions. The maturing adolescent brain is particularly sensitive to alcohol and other drugs.

Most people who go on to become long-term smokers started smoking during their secondary school years and early uptake is associated with heavier smoking patterns and greater difficulty in quitting.

The table shows alcohol and tobacco use in 12-17 year olds. The percentage of males in far western NSW that have consumed alcohol in the month prior to the School Students Health Behaviours Survey has increased by 17% since 2005. More males in far western NSW used tobacco in the month prior to the survey compared to 2005. The proportion of 12-17 year olds in NSW that consumed alcohol or used tobacco has decreased since 2005. However, Aboriginal specific data were not available.

Alcohol and tobacco use, youth 12-17 years, far western NSW and NSW, 2005 and 2011

		Far western NSW		NSW
Consumed alcohol	Males	2005	27.8%	40.3%
		2011	44.8%	27.2%
	Females	2005	35.1%	38.5%
		2011	31.0%	26.5%
Tobacco use	Males	2005	7.5%	11.3%
		2011	10.0%	9.8%
	Females	2005	8.6%	11.5%
		2011	7.8%	7.6%

Source: NSW School Students Health Behaviours Survey 2005 & 2011

Part Seven: What kind of families and communities do our children live in?

Environmental circumstances, such as the well-being of families and the strength of communities in which they live, play an important role in determining children's health and well-being. This chapter provides information on economic factors affecting children and young people, their living arrangements and parental and community influences.

Family economic situation

Australia's Children 2012 says:

Low family income can adversely affect the health, education and self-esteem of children.

We found that:

A greater proportion of Aboriginal children in the Maari Ma region had parents that only completed Year 9 or below at school compared to NSW as a whole.

A lower proportion of Aboriginal people were employed in the Maari Ma region and in NSW compared to NSW as a whole.

There is no difference in housing stability between Aboriginal children in the Maari Ma region, Aboriginal children in NSW and children in NSW as a whole.

For most families household income is the most important determinant of their economic situation. Children living in low-income households are more likely to have insufficient economic resources to support a minimum standard of living and this can affect a child's nutrition, access to medical care, the safety of their environment, level of stress in the family and the quality and stability of their care. Household income data are presented in Part Two of this profile.

Parental Education

Higher education status is associated with better health and social outcomes for individuals and families. Conversely, lower education status in general is associated with a higher risk for poorer health and social outcomes for families.

The table shows children aged under 15 years whose parents did not complete secondary school (Year 10 or above) and people that did not go to school. The data demonstrate that a greater percentage of Aboriginal children in the Maari Ma region had parents that only completed Year 9 or below at school compared to NSW. The proportion of people that did not go to school is low across the Maari Ma region and NSW.

At present there are no comparative data for this indicator. This indicator will be followed in subsequent publications.

Children aged under 15 years whose parents only completed Year 9 or below or did not go to school, Maari Ma region and NSW, 2011

	Maari Ma region				NSW			
	Aboriginal		Total		Aboriginal		Total	
	N	%	N	%	N	%	N	%
Completed Year 9 or below	346	^{^*} 31.5%	720	11.8%	12,814	19.2%	84,595	6.2%
Did not go to school	12	1.2%	122	0.6%	866	0.9%	55,371	1.1%

*significantly higher than the current NSW Aboriginal population result

[^]significantly higher than the current NSW total population result

Source: ABS Census 2011

Statistical significance summary:

We have compared the results to the current NSW Aboriginal population result and the current NSW total population result.

Using these two comparisons the results for the current 'Maari Ma Aboriginal' are significantly ...

	NSW Aboriginal	NSW Total
Completed Year 9 or below	HIGHER	HIGHER
Did not go to school	-	-

- not significantly different

Parental employment

Secure employment provides financial stability, confidence and social contact for parents, with positive effects flowing on to children.

The table illustrates the labour force status of parents that have children under the age of 15. A lower proportion of Aboriginal parents are employed in both the Maari Ma region and in NSW compared to their total respective figures. The percentage of parents in a one parent family that are unemployed is higher for Aboriginal families in the Maari Ma region and in NSW compared to NSW as a whole.

At present there are no comparative data for this indicator. This indicator will be followed in subsequent publications.

Labour force status of parents with children aged under 15 years, Maari Ma region and NSW, 2011

		Maari Ma region		NSW	
		Aboriginal	Total	Aboriginal	Total
Couple family	Employed	^{@#} 28.3%	61.0%	40.8%	73.1%
	Unemployed	^{^*} 14.0%	5.5%	6.6%	4.7%
One parent family	Employed	[*] 16.4%	15.4%	16.6%	11.7%
	Unemployed	^{^*} 41.3%	18.1%	36.0%	10.5%

[#]significantly lower than the current NSW Aboriginal population result

^{*}significantly higher than the current NSW Aboriginal population result

[@]significantly lower than the current NSW total population result

[^]significantly higher than the current NSW total population result

Source: ABS Census 2011

Statistical significance summary:

We have compared the results to the current NSW Aboriginal population result and the current NSW total population result.

Using these two comparisons the results for the current 'Maari Ma Aboriginal' are significantly ...

	NSW Aboriginal	NSW Total
Couple family: Employed	LOWER	LOWER
Couple family: Unemployed	HIGHER	HIGHER
One parent family: Employed	HIGHER	-
One parent family: Unemployed	HIGHER	HIGHER

- not significantly different

Housing stability

Moving house can be stressful, especially for children as it can disrupt routine and stability. The table shows the proportion of children between the age of 5 and 19 who either have lived at the same address for the last 5 years or more, moved in the last year or moved in the last 5 years.

The data show that a greater proportion of Aboriginal children in the Maari Ma region have lived at the same address for 5 years or more compared to Aboriginal children in NSW. The percentages are similar for Aboriginal children in the Maari Ma region compared to NSW as a whole, except for the indicator where children have moved in the last 5 years. The percentages for children who have moved in the last year or 5 years are quite low and are comparable between Aboriginal children and total children across the Maari Ma region and in NSW.

At present there are no comparative data for this indicator. This indicator will be followed in subsequent publications.

Children 5-19 years who live at the same or different address 1 year ago or 5 years ago, Maari Ma region and NSW, 2011

	Maari Ma region		NSW	
	Aboriginal	Total	Aboriginal	Total
Live at the same address	^{A*} 66.5%	66.7%	53.5%	60.5%
Moved in the last year	[^] 10.5%	8.5%	10.3%	7.8%
Moved in the last 5 years	^{@#} 23.0%	24.8%	36.1%	31.7%

[#]significantly lower than the current NSW Aboriginal population result

^{*}significantly higher than the current NSW Aboriginal population result

[@]significantly lower than the current NSW total population result

[^]significantly higher than the current NSW total population result

Source: ABS Census 2011

Statistical significance summary:

We have compared the results to the current NSW Aboriginal population result and the current NSW total population result.

Using these two comparisons the results for the current ‘Maari Ma Aboriginal’ are significantly ...

	NSW Aboriginal	NSW Total
Live at the same address	HIGHER	HIGHER
Moved in the last year	-	HIGHER
Moved in the last 5 years	LOWER	LOWER

- not significantly different

Children in non-parental care

Australia's Children 2012 says:

Some parents are unable to provide adequately for their children, resulting in their children being placed in the care of relatives, foster families or in residential care.

We found that:

A significantly higher proportion of Aboriginal children in the Maari Ma region are in non-parental care compared to children in NSW.

Children in out-of-home (non-parental) care represent a particularly disadvantaged group. Many have suffered child abuse or neglect and /or family relationship breakdown. Young people in non-parental care have higher levels of aggressive/violent behaviour, substance use, intellectual disability and mental health problems and poorer education outcomes compared with other young people.

The following table shows the numbers and rates of children in non-parental care. Data were not available for NSW Aboriginal children in 2008.

The rate for Aboriginal children in the Maari Ma region is lower than the NSW Aboriginal rate and Aboriginal children in the Maari Ma region are six times more likely to be in non-parental care compared to children in NSW as a whole.

Children (aged 0-14 years) in non-parental, and rates (per 1,000 population), Maari Ma region and NSW, 30 June 2008 and 30 June 2013

		Maari Ma region				NSW			
		Aboriginal		Total		Aboriginal		Total	
		N	Rate	N	Rate	N	Rate	N	Rate
0-5 years	2008	19	48.6	24	12.0	-	-	4,109	8.5
	2013	21	[^] 51.0	36	16.4	1,788	69.5	4,832	8.8
6-10 years	2008	28	80.2	35	19.6	-	-	4,564	11.0
	2013	32	^{^*} 74.4	44	21.5	2,164	107.4	5,929	13.7
11-14 years	2008	33	117.4	43	28.1	-	-	3,833	11.1
	2013	31	[^] 111.1	42	27.6	1,612	96.4	4,633	13.2
TOTAL	2008	80	78.4	102	19.2	-	-	12,506	10.0
	2013	84	[^] 78.8	122	21.8	5,564	91.1	15,394	11.9

*significantly higher than the current NSW Aboriginal population result

@significantly lower than the current NSW total population result

[^]significantly higher than the current NSW total population result

Source: Department of Family & Community Services 2008 & 2013, ABS 2006 & 2011 Census

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
0-5 years	-	-	HIGHER
6-10 years	-	HIGHER	HIGHER
11-14 years	-	-	HIGHER
Total	-	-	HIGHER

- not significantly different

Parental health and disability

Australia's Children 2012 says:

Raising children involves physical, emotional and financial demands that can pose significant challenges to a parent with physical or mental health problems or a disability.

We found that:

The percentage of children under 15 years of age that live with a parent with a disability is significantly higher in the Maari Ma region compared to NSW.

Parent's health and well-being impacts on the health and well-being of their children in a number of ways. Children rely on their primary carer for their physical, emotional and economic needs, and support. When disruption to parenting occurs, as sometimes happens with the onset of a physical or mental illness, the needs of a child may receive less attention or may not be met at all.

There are a wide range of issues faced by families in which one or both parents have a disability. When children are very young, the capacity of parents who have a disability to fully care for their children, and the adequacy and availability of specialised support services, are important issues. While a range of support services is available to people with disability in the arenas of employment and accommodation, there is a more limited range of services supporting the needs of parents with a disability.

As children grow older, the extent to which they take on a caring role for their parents and their access to educational and other opportunities become an issue. Finally, when children reach adulthood, their freedom to leave home and to begin independent lives may be affected by their parent's disability. These issues may be compounded by the socio-economic disadvantage sometimes faced by families in which one or more parents have a disability²⁵.

The table shows the proportion of children aged under 15 years who live with a parent that has a disability. The rate of Aboriginal children that live with a parent with a disability in the Maari Ma region is lower than the rate of Aboriginal children in NSW. When comparing the rate for Aboriginal children in the Maari Ma region to the total NSW rate, the rate is higher for Aboriginal children in the Maari Ma region.

At present there are no comparative data for this indicator. This indicator will be followed in subsequent publications.

²⁵ Australian Bureau of Statistics, Family Formation: Children With Parents With a Disability, 2006, viewed 2 June 2014, <http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/91df042707be0b9dca2570ec000e2819!OpenDocument>

Children aged under 15 years who live with a parent with a disability and rates (per 1,000) population, Maari Ma region and NSW, 2011

	Maari Ma region				NSW			
	Aboriginal		Total		Aboriginal		Total	
	N	Rate	N	Rate	N	Rate	N	Rate
Children	37	33.7	127	20.9	2,697	40.4	27,494	20.3

*significantly higher than the current NSW total population result

Source: ABS Census 2011

Statistical significance summary:

We have compared the results to the current NSW Aboriginal population result and the current NSW total population result.

Using these two comparisons the results for the current 'Maari Ma Aboriginal' are significantly ...

	NSW Aboriginal	NSW Total
Children	-	HIGHER

- not significantly different

Neighbourhood safety

Australia's Children 2012 says:

Children are shaped not only by their family environment, but also by the neighbourhood in which they live. A number of neighbourhood characteristics influence child outcomes, including the availability of local social networks, peer influences, quality of local services, economic opportunities, and exposure to crime and violence.

We found that:

A survey of parents in 2009/10 found that almost three-quarters of people in the Maari Ma region felt they lived in an area that had a safe reputation. At the same time the rate of offending (assaults, robberies and thefts) has decreased statewide. There is still, however, a significantly higher rate of assaults and thefts in the Maari Ma region compared to NSW as a whole.

High neighbourhood quality has been associated with positive outcomes for children, including lower levels of child maltreatment and youth delinquency and higher levels of children's physical and mental health, educational attainment and collective efficacy. One of the most common indicators of neighbourhood quality is parents' perception of neighbourhood safety.

The 2009/10 Child Health Survey reports that 72% of residents in the region felt they lived in an area that had a safe reputation compared with 75% of residents in NSW.

Another indicator of neighbourhood safety is the rate of assaults, robbery and theft²⁶ in the local area. The table show data for assaults, robberies and thefts supplied by the NSW Bureau of Crime Statistics and Research (BOCSAR).

The rate for all offences in both the Maari Ma region and NSW has decreased since the last report, however, the rate of assaults and thefts for the recent period in the Maari Ma region is significantly higher than NSW as a whole. While not statistically significantly different, the rate of robbery in the Maari Ma region is about a quarter that of the NSW rate.

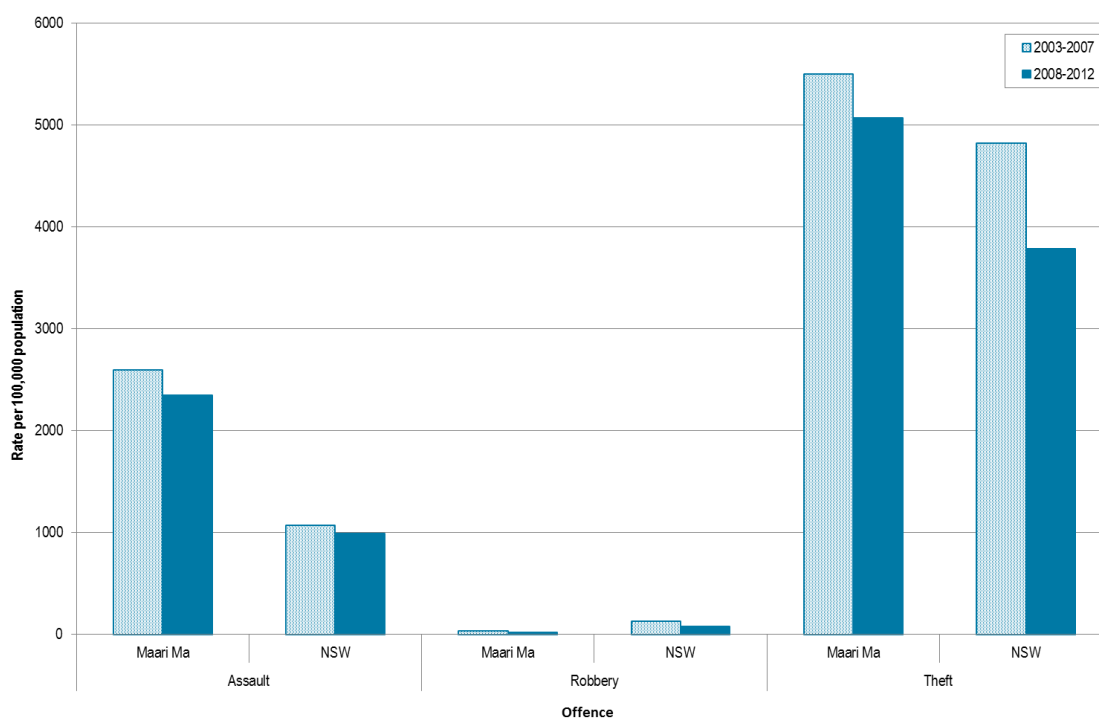
²⁶ The difference between 'robbery' and 'theft' is explained in the Glossary under 'Crime data'

Average number per year (n) and rates of assaults, robbery and theft (per 100,000 total population), Maari Ma region and NSW, 2003-2007 and 2008-2012

		Maari Ma region		NSW	
		n	Rate	n	Rate
Assault	2003-2007	810.8	2,594.5	69,968.6	1,068.4
	2008-2012	706.4	^a 2,347.3	68,286.4	987.1
Robbery	2003-2007	10.8	34.6	8,135.0	124.2
	2008-2012	6.8	22.6	5,493.8	79.4
Theft	2003-2007	1,718.0	5,497.4	315,769.6	4,821.5
	2008-2012	1,526.2	^a 5,071.4	261,809.6	3,784.7

^asignificantly higher than the current NSW total population result
Source: BOCSAR 2003-2007 & 2008-2012, ABS 2006 & 2011

Rates of assault, robbery and theft (per 100,000 total population), Maari Ma region and NSW, 2003-2007 and 2008-2012



Source: BOCSAR 2003-2007 & 2008-2012, ABS 2006 & 2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Total
Assault	-	HIGHER
Robbery	-	-
Theft	-	HIGHER

- not significantly different

Social capital

Australia's Children 2012 says:

Families with rich social networks have greater access to friends and neighbours to assist in managing their daily lives and problems.

We found that:

Around the same percentage of families in the Maari Ma region and in NSW felt that they could ask their neighbours to care for their child.

The percentage of 20-24 year olds that have registered to vote in NSW is nearly double the percentage of the Maari Ma region.

Social capital is an important part of the social context in which a child develops. It refers to the connections among individuals or the social networks that facilitate the norms of reciprocity and trustworthiness.

Families with rich social support networks have been found to have increased access to information, material resources, and friends and neighbours to assist them in managing their daily lives and problems.

The table shows the percentage of families that felt that they were able to ask their neighbours to care for their child which is one measure of social capital. The percentages in the Maari Ma region are similar to NSW for both 2005 and 2011. Aboriginal specific data were not available.

Able to ask neighbours to care for a child, Maari Ma region and NSW, 2005 and 2011

		Maari Ma region	NSW
Families	2005	55.5%	57.5%
	2011	54.6%	56.7%

Source: NSW Adult Population Health Survey 2005 & 2011

Engagement in society

The table shows the percentage of 16-19 year olds that are registered to vote in the Division of Farrer (which covers the far west region of NSW) compared to NSW. The Division of Farrer includes the Unincorporated Far West, Broken Hill, Albury, Balranald, Berrigan, Cornago, Corowa, Deniliquin, Greater Hume, Hay, Jerilderie, Lockhart, Murray, Wakool, Wentworth, Urana and Central Darling.

A small proportion of 16-17 year olds in both the Division of Farrer and NSW are enrolled to vote. Only half of the 18-24 year old population in the Division of Farrer are currently enrolled to vote, compared to NSW where 81.9% of the population are enrolled to vote by the age of 24. These data will be followed in subsequent publications. Aboriginal specific data were not available.

Proportion of eligible 16-24 year olds registered to vote, Maari Ma region and NSW, 30 June 2014

	Division of Farrer	NSW
16-17 year olds	5.0%	8.5%
18-19 year olds	46.5%	56.2%
20-24 year olds	47.6%	81.9%

Source: AEC 2014

Part Eight: How safe and secure are our children?

All children have the right to live in a secure environment. This chapter focuses on the safety and security of our children and young people and discusses factors that place children at immediate and long-term risk of physical and/or emotional harm.

Injuries

Australia's Children 2012 says:

Injuries are the leading cause of health and hospitalisation among children but can be reduced by controlling hazards in a child's environment. Injuries resulting in a disability and disfigurement can impair a child's development and affect their future well-being.

We found that:

The death and hospitalisation rates for Aboriginal children in the Maari Ma region are about the same as for all NSW Aboriginal children. The rate of hospital admission for Aboriginal children in our region is statistically higher than that of all NSW children.

Many injuries are preventable, and are therefore amenable to intervention. Injury prevention and control is a National Health Priority Area.

The following table shows the rates of injury death (mortality) and injury admissions. During the latest reporting period there were no deaths of Aboriginal children in the region due to injury, accidents or poisoning. The rate for Aboriginal children in NSW has doubled, however it is not statistically significant. The observed increase is most likely due to fluctuations in small numbers.

The rate of admission to hospital for injury and poisoning has also marginally increased since the last report. The rate for Aboriginal children and youth in the Maari Ma region is significantly higher than NSW as a whole.

In the previous profile we reported data for presentations to the Emergency Department but data for this period were not available. However, it was reported by parents in the most recent NSW Child Health Survey that 32% of children in the far west aged 0-15 years presented to the Emergency Department, compared to 27% in NSW as a whole.

Mortality (per 100,000 children) and admissions (per 1,000 children) attributed to injuries, accidents and poisoning for children aged 0-14 years, average number per year (n) and rate, 1999-2013

		Maari Ma region				NSW			
		Aboriginal		Total		Aboriginal		Total	
		n	Rate	n	Rate	n	Rate	n	Rate
Mortality	1999-2006	< 5	24.4	< 5	10.7	< 5	5.2	40	3.1
	2007-2011	0	0	< 5	22.1	6.4	10.4	65	4.9
Admission to hospital	2005-2007	19	18.4	84	13.4	1,076	20.2	21,907	16.9
	2008-2012	25	24.1	99	17.4	1,333	21.3	21,506	16.1

^asignificantly higher than the current NSW total population result

Source: ABS deaths 1999-2011, NSW Ministry of Health
2005/06-2007/08 & 2008/09-2012/13

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Mortality rate	-	-	-
Admission to hospital	-	-	HIGHER

- not significantly different

Suicide

Suicide is an extremely distressing event that can have profoundly disruptive effects on the family, friends and communities of those who take their own lives. Some risk factors for youth suicide such as antisocial behaviour, poor family cohesion and parental mental health issues are evident from early childhood. Other risk factors including academic failure, school drop-out, depressive symptoms and substance abuse manifest in later childhood and adolescence. However, some risk factors are even more proximal, for example suicidal behaviour and stressful life events²⁷.

The World Health Organisation (WHO) reported that the global suicide rate was 16 per 100,000 and 1.8% of deaths worldwide can be attributed to suicide. Lithuania had the highest rate of suicide in the world (40 per 100,000) and Australia was ranked 44th on the international suicide scale with a rate of 10.8 per 100,000²⁸.

The rates of suicide are substantially higher in Aboriginal and Torres Strait Islander peoples and account for 4.2% of all Indigenous deaths as compared to 1.6% of all deaths nationally.

²⁷ The Royal Children's Hospital (Melbourne), Youth suicide in Australia, 2012, viewed 8 July 2014, http://www.rch.org.au/cah/research/Youth_Suicide_in_Australia/

²⁸ World Health Organisation, Suicide data, 2014, viewed 8 July 2014, http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/

Suicide is significantly more prevalent in the earlier adult years of Aboriginal and Torres Strait Islander people than it is in non-Indigenous Australians²⁹.

Data for suicide are reported in the table. When comparing the rate of suicide in Aboriginal youth in the Maari Ma region to the total NSW figure, the rate of the Aboriginal population in the Maari Ma region is four times that of NSW as a whole. The data illustrate that the rate of suicide in Aboriginal youth in the Maari Ma region is similar to the global suicide rate. However, due to the small numbers in the Maari Ma region, these data should be interpreted with caution.

Number and rates of suicide deaths (per 100,000) in 0-24 year olds, Maari Ma region and NSW, 2007-2011

	Maari Ma region				NSW			
	Aboriginal N	Rate	Total N	Rate	Aboriginal N	Rate	Total N	Rate
0-24 years	< 5	18.7	7	15.5	33	8.2	519	4.6

^asignificantly higher than the current NSW total population result
Source: NSW Ministry of Health 2007-2011

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	NSW Aboriginal	NSW Total
0-24 years	-	HIGHER

- not significantly different

²⁹ Hunter Institute of Mental Health, Reporting and portrayal of suicide, 2014, viewed 8 July 2014, <http://www.mindframe-media.info/for-media/reporting-suicide/priority-population-groups/aboriginal-and-torres-strait-islander-australians>

School relationships and bullying

Australia's Children 2012 says:

Children who are bullied may have higher absenteeism, lower academic achievement, physical and somatic symptoms, anxiety and depression, social dysfunction, and alcohol and substance use.

We found that:

There is currently no suitable data source for this indicator.

School connectedness and supportive social relationships have been associated with lower levels of absenteeism, delinquency, aggression, substance use and higher levels of academic achievement and self-esteem amongst children. Conversely bullying is associated with lower academic achievement, feeling 'unsafe' at school, depression and contributes to maladjustment of children at school.

National organisations have identified that data pertaining to school relationships and bullying are important to collect, however, at present, there are no systems in place to allow the collection of those data to occur.

Child abuse and neglect

Australia's Children 2012 says:

Abuse and neglect victims may experience lower social competence, poor school performance, impaired language ability, and are at increased risk of criminal offending and mental health problems.

We found that:

The rate of children that are involved in reports where risk or actual harm has been determined is significantly higher for Aboriginal children in the Maari Ma region compared to Aboriginal children in NSW and all children in NSW.

There is a demonstrated relationship between the health and well-being of children and the environment in which they grow up. Children who are raised in supportive, nurturing environments are more likely to have better social, behavioural and health outcomes. Children who have been abused or neglected often have poor developmental outcomes, such as lower social competence, poor school performance higher rates of behavioural, emotional and mental health problems and a greater likelihood of criminal offending later in life.

In Australia, statutory child protection systems are the responsibility of the state and territory governments. Child protection substantiation refers to the determination, after investigation, that a child has been, is being or likely to be, abused or neglected or otherwise harmed. Child abuse may include physical, sexual or emotional abuse or neglect.

The table describes the number of children involved in reports where risk or actual harm had been satisfactorily determined. The rate of harm for Aboriginal children in the Maari Ma region is ten times higher than the rate of NSW as a whole. The data demonstrate that the rates of harm between the 2007/08 period and the 2012/13 period are similar. Data were not available for NSW Aboriginal children in 2007/08.

Children (aged 0-14 years) involved in reports where secondary assessment determined actual harm and risk of harm, and rates (per 1,000 children), Maari Ma region and NSW, 2007/08 and 2012/13

		Maari Ma region				NSW			
		Aboriginal		Total		Aboriginal		Total	
		N	Rate	N	Rate	N	Rate	N	Rate
0-5 years	2007/08	42	107.4	66	33.0	-	-	6,117	12.6
	2012/13	55	^{^*} 133.5	112	51.1	2,489	96.8	7,669	14.0
6-10 years	2007/08	38	108.9	51	28.5	-	-	3,500	8.4
	2012/13	35	^{^*} 81.4	65	31.7	1,259	62.5	4,128	9.6
11-14 years	2007/08	29	103.2	44	28.8	-	-	2,042	5.9
	2012/13	32	^{^*} 114.7	57	37.4	869	52.0	3,207	9.1
TOTAL	2007/08	109	106.8	161	30.3	-	-	11,659	9.4
	2012/13	122	^{^*} 109.9	234	40.1	4,617	70.4	15,004	10.9

*significantly higher than the current NSW Aboriginal population result

[^]significantly higher than the current NSW total population result

Source: Department of Family & Community Services: KIDS - CIW annual data and Annual Statistical Report 2007/08 & 2012/13, ABS 2006 & 2011 Census

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
0-5 years	-	HIGHER	HIGHER
6-10 years	-	HIGHER	HIGHER
11-14 years	-	HIGHER	HIGHER
Total	-	HIGHER	HIGHER

- not significantly different

Children as victims of violence

Australia's Children 2012 says:

Being a victim of violence can be detrimental to children's health, sense of safety and security, and their feelings about the future. Physical and sexual assault can have complex short- and long-term negative effects on the physical and psychological health of children.

We found that:

Since the last report the rate of children aged under 18 who were victims of violent offences had decreased both in the Maari Ma region and in NSW. There continues, however, to be a significantly higher rate in the Maari Ma region compared to both the NSW Aboriginal and NSW total populations.

Being a victim of crime can be detrimental to a child's health, well-being, sense of security, safety and feelings about the future. For some children being victimised may lead to diminished education attainment and social participation in early adulthood, or result in physical injury, disability and even death. Experience of crime is central to issues of community safety in general and even more so for children as the most vulnerable members of society.

BOCSAR has supplied crime data where the victim of the crime was aged under 18 years.

Across NSW the rates of children who are victims of violent offences has decreased since the last reporting period however the average number of Aboriginal children in NSW has increased. In the Maari Ma region the rate has decreased by 27% since the last report and, while not significant, this decrease will have a positive impact on the future development of these children and their communities. The rate in the Maari Ma region continues to be significantly higher than that for both the NSW Aboriginal and NSW total populations.

Victims aged under 18 years of violent offences³⁰, recorded by NSW Police, average number per year (n) and rates (per 1,000 children), Maari Ma region and NSW, 2003-2008 & 2009-2013

		Maari Ma region				NSW			
		Aboriginal		Total		Aboriginal		Total	
		n	Rate	n	Rate	n	Rate	n	Rate
Children as victims	2003-2008	84.5	70.7	224.0	29.6	1,519.3	24.1	20,065.3	12.8
	2009-2013	64.2	*51.9	174.0	25.4	1,691.2	22.6	19,522.8	12.2

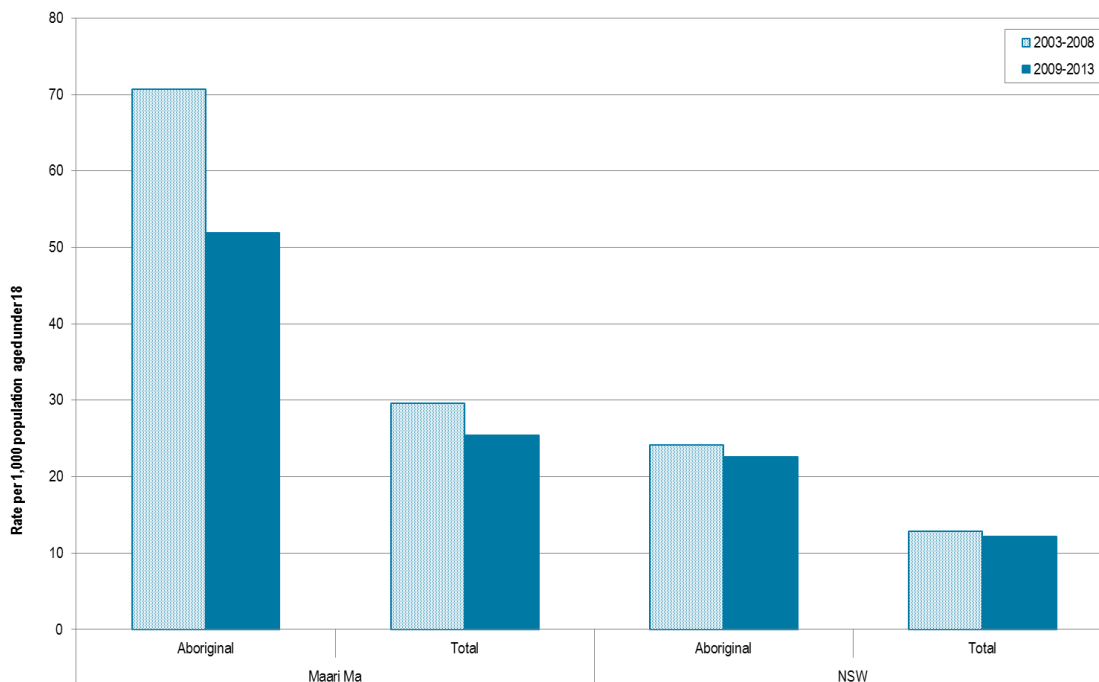
*significantly higher than the current NSW Aboriginal population result

^significantly higher than the current NSW total population result

Source: NSW Bureau of Crime Statistics and Research 2003-2008 & 2009-2013

³⁰ Violent offences included here are homicide, assault, sexual offences and robbery

Rate of children as victims of violent crimes (per 1,000 children aged under 18 years), Maari Ma region and NSW, 2003-2013



Source: NSW Bureau of Crime Statistics and Research 2003-2013

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Children as victims of violent crimes	-	HIGHER	HIGHER

- not significantly different

Homelessness

Australia's Children 2012 says:

Children who are homeless are more likely to continue to be homeless into adulthood.

We found that:

Homelessness data specific to the Maari Ma region are not presented in this profile as it cannot be directly compared to previous data due to the change in the homelessness program and services.

Children who are homeless, whether as part of a family unit or on their own, experience significant negative social and health consequences. Homelessness is associated with increased prevalence of a number of health conditions including gastroenteritis, bronchitis and asthma. The factors contributing to homelessness are complex, and may be the result of domestic violence, family or relationship breakdown, poverty or financial crisis, mental illness or lack of affordable housing.

The Supported Accommodation Assistance Program (SAAP) began in 1985 to assist homeless people and women and children leaving violent relationships. The Specialist Homelessness Services program (SHS) is a Commonwealth/state funded program that replaced SAAP in 2009. The services that are included in this program are case management, support, outreach, advocacy, practical assistance and supported accommodation services, as well as linkages to other services such as health and housing.

The 2013 Specialist Homelessness Services report stated that in 2012/13, 51,953 people received assistance from specialist homelessness agencies and 21% of those people were Aboriginal. Most of the people that received assistance were between the age of 18 and 44 years.

Due to the change from SAAP to SHS, homelessness data specific to the Maari Ma region as well as NSW is not presented in this profile as it cannot be directly compared.

Children and crime

Australia's Children 2012 says:

Children in the juvenile justice system are a particularly disadvantaged population and are vulnerable to continued and more serious offending later in life.

We found that:

While the rates for young Aboriginal people in the Maari Ma region who were found guilty in court for their principal offence were about the same as all Aboriginal youth in NSW, they were up to 17 times that for all NSW young people.

The AIHW reports that children who have been victimised are at greater risk of later offending. For most children engaged in criminal activities, the nature of the offence is relatively minor and the behaviour is short lived. However for a small number of children this behaviour becomes more serious or persistent and results in contact with the juvenile justice system.

Young people in the criminal justice system represent a particularly disadvantaged population, characterised by high levels of socio-economic stress, significant physical and mental health needs, and history of physical abuse and childhood neglect. Childhood neglect is one of the strongest predictors of later youth offending.

The following table shows court outcome data, supplied by BOCSAR. BOCSAR recommend collapsing all categories of outcomes into three broad categories – bonds, custodial sentences and other. A table in the glossary of this document shows the outcomes included in each of the categories shown.

There were higher rates of Aboriginal young people in the Maari Ma region aged 10-17 who were found guilty in court for their principal offence compared to both NSW Aboriginal and all NSW young people of the same age. Rates for all outcomes for Aboriginal youth in the Maari Ma region were significantly higher than the rates for all NSW youth.

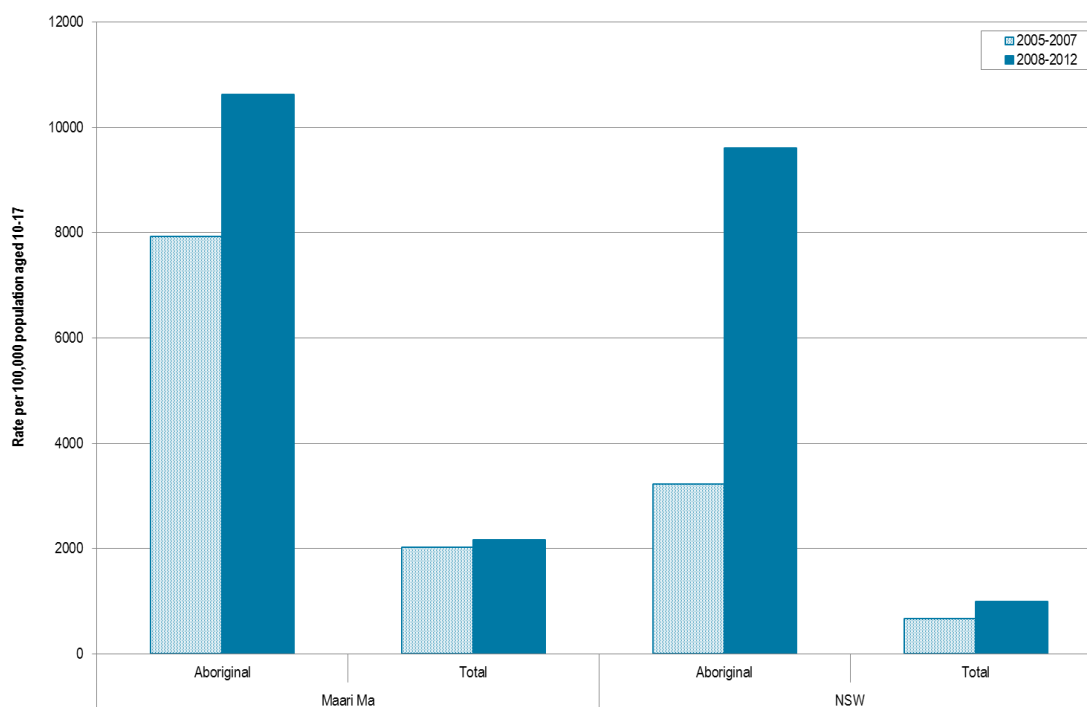
Court outcomes for children aged 10-17 years, average number per year (n) and rates (per 100,000 children), Maari Ma region and NSW, 2005-2007 and 2008-2012

		Maari Ma region				NSW			
		Aboriginal		Total		Aboriginal		Total	
		n	Rate	n	Rate	n	Rate	n	Rate
Bonds	2005-2007	22.7	4,284.8	27.7	786.0	497.7	1,776.4	1,902.0	265.3
	2008-2012	32.8	[^] 5,867.6	42.4	1,376.6	1,349.0	4,073.4	3,377.0	477.3
Custodial sentences	2005-2007	7.0	1,323.3	7.0	198.9	193.7	691.3	387.7	54.1
	2008-2012	9.4	[^] 1,681.6	9.6	311.7	415.4	1,254.3	681.4	96.3
Other	2005-2007	14.7	2,772.5	28.0	795.5	378.3	1,350.4	2,460.3	343.2
	2008-2012	14.0	[^] 2,504.5	24.4	792.2	929.4	2,806.4	3,051.4	431.3

[^]significantly higher than the current NSW total population result

Source: NSW Bureau of Crime Statistics and Research 2005-2007 & 2008-2012

Rate of guilty court outcomes (per 100,000 children aged 10-17 years), Maari Ma region and NSW, 2005-2007 and 2008-2012



Source: NSW Bureau of Crime Statistics and Research 2005-2012

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period, the current NSW Aboriginal population, and the current NSW total population.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous	NSW Aboriginal	NSW Total
Bonds	-	-	HIGHER
Custodial sentences	-	-	HIGHER
Other	-	-	HIGHER

- not significantly different

Part Nine: How well is the system performing?

The capacity of systems to deliver high quality services plays a major role in influencing the health and well-being of children. This chapter looks at indicators that reflect the performance of systems in delivering quality health, development and well-being actions to our region's children.

Congenital anomalies

Australia's Children 2012 says:

Congenital anomalies are a major cause of hospitalisation in infancy and childhood and a leading cause of infant mortality in Australia.

We found that:

Due to the small numbers in the Maari Ma region, data for this indicator have not been presented in this profile.

Congenital rubella and neural tube defects are two conditions amenable to prevention through folate supplementation before and immediately after conception and improved population immunisation against rubella, respectively. However, cases are sporadic and few in the Maari Ma region and we have therefore not reported rates.

Neonatal hearing screening

Australia's Children 2012 says:

Hearing impairment at birth often has major, lasting effects on language and communication. However, early diagnosis and intervention can improve language acquisition and, subsequently, educational outcomes and social development.

We found that:

All babies born at the Broken Hill Health Service in 2013 were screened for hearing and none of them required further hearing testing or hearing aids.

Newborn hearing testing has been done routinely in NSW since 2003. The NSW Statewide Infant Screening – Hearing (SWISH) aims to identify babies with significant permanent hearing loss by three months of age and for those children to be able to access appropriate intervention by 6 months of age.

In 2007 100% of babies were screened at the Broken Hill Service and the GWAHS SWISH Coordinator advised that there were no children in Broken Hill who required hearing aids. In 2013 100% of babies born at Broken Hill Health Service were also screened. The FWLHD SWISH Coordinator advised that there were no children in Broken Hill who required hearing aids or further testing. This is not unexpected since the annual average rate of babies with bilateral hearing loss between 2006 and 2010 in NSW was 0.97 per 1,000 live births. In 2013 there were only 222 live births in Broken Hill.

Childhood immunisation

Australia's Children 2012 says:

Immunisation coverage reflects the capacity of the health care system to provide vaccinations to children. A large part of the reduction in mortality and morbidity among children over the past century was due to immunisation. Children who do not receive complete and timely immunisations remain at risk of contracting vaccine preventable diseases, and the short- and long-term health consequences associated with these. In some cases, the long-term complications of the disease can be even more severe than the disease itself.

We found that:

Timeliness of immunisation has been measured in the Maari Ma region since 2007 using the ABCD Child Health audit tool. Significant improvements have been in the proportion of children of all ages across all immunisations that had them on time.

Immunisation from childhood diseases such as measles, whooping cough, diphtheria and polio are of the most cost effective public health interventions in preventing childhood morbidity and mortality. In 2000 the World Bank reported that the rate of immunisation coverage reflects the capacity of a health system to effectively target and provide vaccinations to all children.

ABCD audit data have been used for the Maari Ma region, as this considers timeliness of immunisation as a factor when deciding if a child has been fully immunised. Timeliness of immunisation is important to reduce the excess morbidity and mortality suffered by all children.

Comparing 2008 and 2013 ABCD audit results shows that there has been a significant improvement in timely immunisation rates across all age groups and vaccine for children in the Maari Ma region.

Childhood immunisation, Maari Ma region, 2008 and 2013

Age	Timeframe		ABCD ³¹ Maari Ma region	
			2008	2013
2 months	Before 3 months	DTPa/Hib/HepB/IPV	74.2%	↑86.6%
		PCV7V	74.2%	↑86.6%
		Rotavirus	-	86.6%
4 months	Before 5 months	DTPa/Hib/HepB/IPV	59.5%	↑79.5%
		PCV7V	59.5%	↑78.4%
		Rotavirus	-	78.9%
6 months	Before 7 months	DTPa/Hib/HepB/IPV	52%	↑74.1%
		PCV7V	50%	↑74.7%
12 months	Before 14 months	MMR	53%	↑81.1%
		HiB	51%	↑80.4%
		Men C	51%	↑80.4%
18 months	Before 20 months	VZV	34%	↑76.8%
4 years	Before 4 1/2 years	DTPa/IPV	55%	↑92.3%
		MMR	52%	↑86.5%

³¹significantly higher than the previous period MM-R Aboriginal result
Source: ABCD 2008 & 2013

The Australian Childhood Immunisation Register (ACIR) supplies data to the NSW Ministry of Health on a quarterly basis. ACIR data are not measured against timeliness; rather it is a coverage statistic for an age bracket. ACIR relies on uploaded data from electronic medical record software. At times this automated process can fail and manual upload of data is required which may render the system not up to date. Due to these issues ACIR data should be read with caution.

The following table shows the results provided by the NSW Ministry of Health for the Maari Ma region. The overall immunisation coverage rate for Aboriginal 1 year olds is considerably lower than the rate for the region and NSW. Conversely the results for the region's Aboriginal 2 and 4 year olds are higher than both the rate for the region and NSW rates.

Immunisation coverage rates, fully immunised at 1, 2 and 4 years, Maari Ma region and NSW, September 2014

	Maari Ma region		NSW	
	Aboriginal	Total	Aboriginal	Total
1 year old fully immunised	79.3%	91.0%	88.2%	92.3%
2 year old fully immunised	96.2%	92.7%	94.6%	92.4%
4 year old fully immunised	96.2%	95.1%	91.0%	92.6%

Source: ACIR 2014, NSW Ministry of Health 2014

³¹ Data from 179 child health file audits compared to 163 child health file audits in 2008

Statistical significance summary:

We have compared the results for the current Maari Ma Aboriginal to the previous Maari Ma Aboriginal period.

Using these three comparisons the results for current Maari Ma Aboriginal are significantly (a better result is shaded)...

	MM-R Aboriginal previous
2 months: DTPa/Hib/HepB/IPV	HIGHER
2 months: PCV7V	HIGHER
2 months: Rotavirus	-
4 months: DTPa/Hib/HepB/IPV	HIGHER
4 months: PCV7V	HIGHER
4 months: Rotavirus	-
6 months: DTPa/Hib/HepB/IPV	HIGHER
6 months: PCV7V	HIGHER
12 months: MMR	HIGHER
12 months: HiB	HIGHER
12 months : MenC	HIGHER
18 months: VZV	HIGHER
4 years: DTPa/IPV	HIGHER
4 years: MMR	HIGHER

- not significantly different

Quality childcare

Australia's Children 2012 says:

Good-quality childcare provides support for a child's learning, socialisation, development and their transition to school.

We found that:

Currently all childcare facilities in the Maari Ma region are registered with ACECOA and all are working towards meeting the National Quality Standard.

Good-quality childcare can be an effective intervention for disadvantaged children or those with special education needs. Conversely, poor-quality childcare may be associated with developmental risk.

The National Quality Framework (NQF) establishes higher standards for all education and care services in Australia so children to age 13 get the best possible start in life. The program sets levels of safety and quality to benefit all children and their families who use approved education and care services. Australia has chosen to have a shared vision and national program to make the most of a child's ability to learn from the earliest stages of development. For the first time, the NQF provides national reforms and introduces a consistent standard to make sure children are safe, happy and learning under the guidance of qualified educators³².

To ensure the NQF is delivered consistently and reliably, the Australian Children's Education and Care Quality Authority (ACECQA) is working with regulatory authorities and state and territory governments as they implement the new regulations.

The National Quality Standard (NQS) promotes continuous quality improvement under the NQF. All six childcare facilities in the Maari Ma region are currently registered with ACECQA. The following is a link to the ACECQA website where a National Register outlining the NQS rating for childcare facilities can be accessed at <http://acecqa.gov.au/educators-and-providers1/national-registers>.

³² Australian Children's Education & Care Quality Authority, Introducing the National Quality Framework, 2014, viewed 27 February 2014, <http://www.acecqa.gov.au/national-quality-framework/introducing-the-national-quality-framework>

Part Ten:

Conclusion

Conclusion

This collection of data will allow us to continue to measure progress over time. It is envisaged that this comprehensive collection will continue to be repeated every 5 years, the subsequent set to be published in 2019. There are still important indicators that are currently not collected (as indicated in the AIHW's national key indicators of child health, development and well-being [pages 5 and 6]), but as they become available, will be added to the data set. Finally, this process of implementation of strategies and regular monitoring of key outcomes will facilitate achieving our goal to improve the health and well-being of Aboriginal children in the Maari Ma region and close 'the gap' that currently exists between Aboriginal and non-Aboriginal children.

Part Eleven: Appendices

References

- Australian Bureau of Statistics, Basic community profile, 2006 & 2011, viewed 19 February 2014, <http://www.abs.gov.au/websitedbs/censushome.nsf/home/communityprofiles?opendocument&navpos=230>
- Australian Bureau of Statistics, Census Dictionary, 2006 & 2011, Cat 2901.0, Canberra, 2007.
- Australian Bureau of Statistics, Family formation: Children with parents with a disability, 2006, viewed on 2 June 2014, <http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/91df042707be0b9dca2570ec000e2819!OpenDocument>
- Australian Bureau of Statistics, Indigenous profile, 2006 & 2011, viewed 19 February 2014, <http://www.abs.gov.au/websitedbs/censushome.nsf/home/communityprofiles?opendocument&navpos=230>
- Australian Bureau of Statistics, SEIFA indices. 2006 & 2011, viewed 19 February 2014 <http://www.abs.gov.au/ausstats/abs@.nsf/mf/2033.0.55.001/>
- Australian Children's Education & Care Quality Authority, Introducing the National Quality Framework, 2014, viewed 27 February 2014, <http://www.acecqa.gov.au/national-quality-framework/introducing-the-national-quality-framework>
- Australian Electoral Commission, Elector count by division, age groups and gender for all States/Territories, 2014, viewed 22 July 2014, http://www.aec.gov.au/Enrolling_to_vote/Enrolment_stats/elector_count/2014/elector-count-6-2014.pdf
- Australian Government, Department of Health and Ageing, Menzies School of Health Research, *ABCD Child health clinical audit protocol (version 3.1)*, 14 March 2013.
- Australian Government, Department of Health and Ageing, Menzies School of Health Research. *ABCD Maternal health clinical audit protocol (version 3.0)*, 14 March 2013.
- Australian Government, Department of Human Services, Administrative data, September 2013.
- Australian Institute of Health and Welfare, *Housing assistance in Australia 2012*, viewed 27 March 2014, <https://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129542293>
- Australian Institute of Health and Welfare, *Key national indicators of children's health, development and well-being – Indicator framework for 'A picture of Australia's children – 2009'*, Bulletin 58, Canberra, April 2008.
- Australian Institute of Health and Welfare, *Key national indicators of children's health, development and well-being – Indicator framework for 'A picture of Australia's children - 2012'*, Cat. No. PHE 167, Canberra, October 2012.
- Australian Institute of Health and Welfare. *Making progress: the health, development and well-being of Australia's children and young people*, Cat. No. PHE 104, Canberra, 2008.
- Australian Institute of Health and Welfare. *The health and welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, Cat. No. 4704.0, Canberra, 2008.
- Commonwealth of Australia, Australian Early Development Census, 2009 & 2012, viewed 22 June 2014, <http://www.aedc.gov.au/data>
- C. Kennedy, *Health in the Murdi Paaki*, Broken Hill Centre for Remote Health Research, Broken Hill, 2005.
- Government of South Australia, SA Health, Parenting and Child Health, 2013, viewed 4 November 2014, <http://www.cyh.com/HealthTopics/HealthTopicDetails.aspx?p=114&np=122&id=1910>
- G. Waddell & A.K. Burton, *Is work good for your health and well being?* TSO, London, 2006, viewed 28 March 2014, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214326/hwwb-is-work-good-for-you.pdf
- Hunter Institute of Mental Health. Reporting and portrayal of suicide, 2014, viewed 8 July 2014. <http://www.mindframe-media.info/for-media/reporting-suicide/priority-population-groups/aboriginal-and-torres-strait-islander-australians>
- M. Griffin, L. Jorm, L. Taylor, & M. Thomas, *The health behaviours of secondary school students in New South Wales 2002*, New South Wales Public Health Bulletin Supplementary Series, NSW Department of Health, North Sydney, 2004 vol. 15.

National Health and Medical Research Council, *Infant feeding guidelines: information for health workers* (2012), viewed 10 August 2014, https://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/n56_infant_feeding_guidelines.pdf

NSW Bureau of Crime Statistics and Research (BOCSAR). *NSW Criminal Courts Statistics & Recorded Crime Statistics*, 2013.

NSW Department of Community Services, *NSW Department of Community Services Annual Report 2006/07*, Sydney, 2007.

NSW Department of Education, *Best Start Kindergarten Assessment*, 2008, viewed 10 September 2014, https://www.det.nsw.edu.au/media/downloads/languagesupport/best_start/letter/english.pdf

NSW Department of Family and Community Services, *Family and Community Services Annual Report 2012/13*, Sydney, 2013.

NSW Government, *New school leaving age: information for parents and secondary school students*, 2009, viewed 2 December 2014 <http://www.schools.nsw.edu.au/media/downloads/schoolsweb/leavingschool/schoolleaveage/stuinfosheet.pdf>

NSW Government, *Review of NSW Government Funding for Early Childhood Education*, 2012, viewed 17 July 2014, https://www.det.nsw.edu.au/media/downloads/about-us/statistics-and-research/public-reviews-and-enquiries/review-of-nsw-government-funding-for-early-childhood-education/review_nsw_gov_funding_ece.pdf

NSW Ministry of Health, Centre for Epidemiology and Evidence, *NSW Admitted Patient Data Collection*, North Sydney, 2011.

NSW Ministry of Health, Centre for Epidemiology and Evidence, *NSW Cause of Death Unit Record File (CODURF)*, North Sydney, 2011.

NSW Ministry of Health, Centre for Epidemiology and Evidence, *NSW Child Health Survey 2009/10*, North Sydney, 2011.

NSW Ministry of Health, Centre for Epidemiology and Evidence, *NSW Child Population Health Survey 2012/13*, North Sydney, 2014.

NSW Ministry of Health, Centre for Epidemiology and Evidence, *NSW School Students Health Behaviours Survey 2011*, North Sydney, 2012.

NSW Ministry of Health, Centre for Epidemiology and Evidence, *NSW Perinatal Data Collection*, North Sydney, 2011.

NSW Ministry of Health, Centre for Epidemiology and Evidence, *NSW Population Health Survey: 2005-2006 Report on Child Health*, North Sydney, 2008.

NSW Department of Health, Population Health Division, *The health of the people of New South Wales – Report of the Chief Health Officer: 2008 Summary Report*, North Sydney, 2008.

Royal Children's Hospital (Melbourne), *Youth suicide in Australia*, 2012, viewed 8 July 2014, http://www.rch.org.au/cah/research/Youth_Suicide_in_Australia/

The University of Adelaide, *ARIA (Accessibility/Remoteness Index of Australia)*, 2014, viewed 14 February 2014, http://www.adelaide.edu.au/apmrc/research/projects/category/about_aria.html

World Health Organisation, *Suicide data*, 2014. Viewed 17 September 2014, http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/

Abbreviations

ABCD	Audit and Best Practice for Chronic Disease
ABS	Australian Bureau of Statistics
ACECQA	Australian Children's Education and Care Quality Authority
ACIR	Australian Childhood Immunisation Register
AEDC	Australian Early Development Census
AIHW	Australian Institute of Health and Welfare
BOCSAR	NSW Bureau of Crime Statistics and Research
DTPa	Diphtheria-tetanus-acellular pertussis vaccine
FWLHD	Far West Local Health District
GWAHS	Greater Western Area Health Service
HepB	Hepatitis B vaccine
Hib	Haemophilus influenzae bacillus
LGA	Local Government Area
LHD	Local health district
IPV	Inactivated polio virus
Men C	Meningococcal C conjugate vaccine
MM-R	Maari Ma region
MMR	Measles, mumps and rubella vaccine
NAPLAN	National Assessment Program – Literacy & Numeracy
NSW	New South Wales
NQF	National Quality Framework
NQS	National Quality Standard
PCV7v	Conjugate pneumococcal vaccine
PDC	Patient data collection
PNDC	Perinatal Data Collection
SAAP	Supported Accommodation Assistance Program
SEIFA	Socio-economic indices for Areas
SHS	Specialist Homelessness Services
SIDS	Sudden Infant Death syndrome
sq. km	square kilometres
SWISH	NSW Statewide Infant Screening – Hearing
WHO	World Health Organisation
VZV	Varicella Zoster Virus vaccine

Data Sources

ABCD [Audit and Best Practice for Chronic Disease]

ABCD is an action research program that supports health services to develop continuous improvement approaches to strengthen systems for prevention and management of chronic disease.

The data is obtained through clinical audits of medical records. Medical records of women who had a baby and young children are audited against a selection of key criteria. These data are reported back to the services and services set goals to improve the results in the next year.

Australian Bureau of Statistics

Data were sourced from the 2006 and 2011 Census through the ABS website. The Census provides a wide range of demographic information on age, sex, housing, Aboriginality, income, employment and more. This information can then be used to identify specific populations or areas of need.

Acute illness

Morbidity data were obtained from NSW Ministry of Health's Admitted Patient Data Collection and includes information on patients admitted to all public, private and psychiatric hospitals. Data from the financial years 2005/06 to 2007/08 and 2008/09 to 2012/13 were aggregated.

Important issues affecting the reliability and interpretation of APDC data include

- ◆ Ambiguities in determining principal diagnosis and sequencing diagnoses
- ◆ Completeness of the information supplied on the discharge summary
- ◆ Accuracy of coding.

Deaths

Mortality data were obtained for deaths that occurred between 1997 and 2011. The data file contain information on the principal cause of death, age, sex and place of usual residence and was obtained from the Registry of Births, Deaths and Marriages, via the NSW Ministry of Health.

Important issues affecting the reliability and interpretation of mortality data include

- ◆ The accuracy of the diagnosis recorded on the death certificate. If multiple conditions are present at the time of death, the decision about which was the underlying cause of death might be equivocal
- ◆ Misinterpretation of the guidelines for determining the underlying causes of death by the attending physician completing the death certificate
- ◆ Errors in transcription and coding of death certificates.

Education data

NSW Department of Education and Communities supplied data pertaining to education enrolment and attendance. Results of the NAPLAN scores from 2013 were also provided.

Juvenile Justice data

BOCSAR supply data to describe the Juvenile Justice system.

Established in 1969, BOCSAR is a department of the NSW Attorney General. The Bureau aims to

- ◆ identify factors that affect the distribution and frequency of crime;
- ◆ identify factors that affect the effectiveness, efficiency or equity of the NSW criminal justice system;
- ◆ ensure that information on these factors and on crime and justice trends is available and accessible to our clients.

The information stored in BOCSAR's databases are used to assess crime and justice patterns in NSW. BOCSAR has two databases – one of crimes reported to police, the second of criminal court appearances. The information in the police crimes database includes the type of offence and when and where it was committed. The information in the database of criminal court appearances includes age, gender, type of offence(s), plea, outcome of court appearance and penalty, for persons who appear before the courts charged with criminal offences.

Maternal data

The NSW Perinatal Data Collection (PNDC) was used to provide information on mothers and babies in the Region. The PNDC monitors pregnancies resulting in live or stillbirth, as well as perinatal outcomes. It covers all

births in NSW public and private hospitals as well as home births. Major limitations of the PNDC are inconsistent recording of Aboriginality and notifications of births to NSW women that happen outside the State. Perinatal mortality may also be underestimated.

Data from the Victorian Perinatal Statistics Unit have been sourced to complement the NSW data where possible. Victorian data are included in statistics relating to low birth weight, prematurity, age specific fertility and perinatal outcomes.

Data reported in this document are for the years 2003 to 2007 and 2008 to 2012.

Admission

A patient who is admitted to hospital for treatment as an inpatient (including day-only admission). Admissions do not include

- ◆ Staff receiving care in their quarters;
- ◆ Patients in the Emergency Department who are not transferred to another ward;
- ◆ Newly born children whose mothers are inpatients except if the child is admitted to ICU or receives extensive medical treatment (> 9 days).

Birth

A birth is a live birth, that is, the delivery, irrespective of the duration of pregnancy, of a child who, after being born, breathes or shows any other evidence of life such as a heartbeat.

Crime data

Criminal court outcome data sourced from the NSW Bureau of Crime Statistics and Research (BOCSAR) have been categorised using the following table.

Criminal court outcome data categories

Category	Inclusions
Bonds	Bond with no conviction Bond with supervision Bond without supervision Probation order (Children's Court) S33 (1)(b) bond with and without supervision (Children's Court) Suspended control order/bond (Local Court) Suspended sentence with supervision Suspended sentence without supervision
Custodial sentence	Detention in juvenile justice /control order Imprisonment and periodic detention
Other	Care and treatment order (Magistrate's, District or Supreme Court) Community service order Fine No conviction recorded Nominal sentencing/rising of the court Dismissed with caution S31 (1) young offenders

BOCSAR also supplies crime data. They advised that the difference between 'robbery' and 'theft', in broad terms, is that 'robbery' has an element of violence and threat involved whereas 'theft' does not. In both robbery and theft incidents however, something is intended on being stolen.

Demography

The scientific and statistical study of population, and in particular the size of populations.

Ear health

Admissions for diseases of the ear and mastoid process are grouped using the International Classification of Diseases [ICD10 H60 – H95]. Diseases in this classification include otitis externa, otitis media, perforation of the tympanic membrane (ear drum), otosclerosis, and conductive and sensorineural hearing loss.

Fertility Rate

The number of live births to mothers aged 15 – 44 per 1,000 females in this age group.

Incidence

The number of new cases of a particular health problem within a specified time period. This is usually expressed as a rate per head of population per unit of time.

Infant mortality rate

The infant mortality rate is the number of deaths among children aged less than one year per 1000 live births.

Injury

Admissions for injury, poisoning and certain other consequences of external causes are grouped using the International Classification of Diseases [ICD10 S00-T98]. Admission in this classification include fractures, wounds, strains and sprains, burns, poisonings and complications of surgical or medical care.

Low birth weight

The birth of a baby weighing less than 2500g.

Morbidity

Illness.

Mortality

Death.

NAPLAN test results

The National Assessment Program – Literacy and Numeracy (NAPLAN) tests have been developed collaboratively by the states, territories, Australian government and non-government schools sectors. Results are reported as ‘bands’ and have been collapsed into categories using the following table.

NAPLAN test results band categories

Category	Bands			
	Year 3	Year 5	Year 7	Year 9
Below minimum standard	1	3	4	5
At minimum standard	2	4	5	6
Above minimum standard	3, 4, 5, 6	5, 6, 7, 8	6, 7, 8, 9	7, 8, 9, 10

Perinatal mortality rate

The number of perinatal deaths (stillbirths and neonatal deaths) per 1,000 total births (live births and still births) during a calendar year.

Prevalence

The extent of a particular health problem within a specified population at one point in time. This is usually expressed as a rate per head of population.

Respiratory illness

Admissions for diseases of the respiratory system are grouped using the International Classification of Diseases [ICD10 J00 – J99]. Diseases in this classification include acute upper respiratory infections (sinusitis and tonsillitis), influenza and pneumonia, bronchitis and asthma.

SEIFA indices

The ABS has developed socio-economic indices for areas (SEIFA) as scores that are combined measures of individual socio-economic indicators. These indices summarise different aspects of socio-economic conditions by geographical areas.

There are five indices. Each index is constructed with a mean “score” of 1000 and a standard deviation of 100 for Australia. All geographical areas are described relative to the Australian estimates. However, SEIFA indices are ordinal measures only. An index of 1100 does not infer that the particular area is 10% better than the Australian average, only that it is better.

Significance level

The statistical significance level defines the degree of certainty that an observation or health event is real and not due to chance. Significance levels can be expressed either as a proportion or “p” value or as a confidence interval. A standard level of significance is $p < 0.05$, that is, there is less than 5% probability that the value is due to chance. An alternative way of expressing this p value is to quote the 95% confidence interval in which there is a 95% certainty that the real value lies within the given range.

