



Australian Government

Australian Institute of Health and Welfare

# New Directions: Mothers and Babies Services

Assessment of the program using nKPI data  
December 2012 to December 2013



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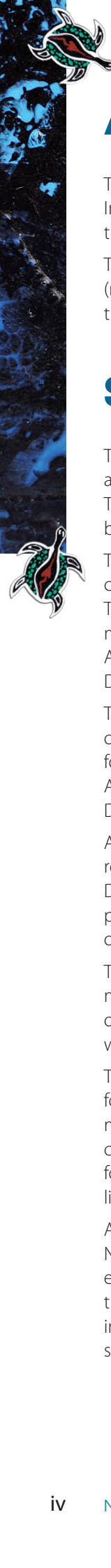
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## Summary

The New Directions: Mothers and Babies Services program, funded by the Australian Government, aims to increase access to, and use of, child and maternal healthcare services for Aboriginal and Torres Strait Islander families. There were 85 health organisations across Australia funded to implement the program in five waves over 5 years, beginning in 2007–08.

The Department of Health was interested in gaining insights into how well the program was performing. No data collection had been set up specifically to monitor the New Directions program, nor to collect baseline information. There is, however, an existing national Key Performance Indicators (nKPIs) data collection that includes child and maternal health indicators. The nKPIs collect six-monthly data on a range of primary health care indicators from Aboriginal and Torres Strait Islander health organisations, including most of the organisations that receive New Directions funding.

The 8 maternal and child health measures included in the nKPIs are: antenatal care provided before 13 weeks of pregnancy; birthweight recorded; birthweight result; health assessment for 0–4 year olds; health assessment for women; and 3 immunisation measures (whether 1, 2 and 5 year olds were recorded as fully immunised). The AIHW compiled data on the 8 measures, and compared the results for the 77 nKPI organisations that received New Directions funding in waves 1 to 4 with 123 other broadly comparable nKPI organisations.

At the time of this analysis, the nKPI data for the maternal and child health measures were available for either two reporting periods (June 2013 and December 2013) or three reporting periods (December 2012, June 2013 and December 2013), depending on the measure. The available data therefore only covered a relatively short time period, and it was anticipated that improvements in process rather than outcome measures were more likely to be observed in the early years, as organisations have more direct influence over these.

The two groups of organisations were assessed in relation to whether they achieved a particular measure for more than half of their clients. For example, for antenatal care, the measurement criterion was the proportion of organisations where more than half of women attended their first antenatal visit before 13 weeks of pregnancy, while for immunisation it was whether more than half of children were recorded as being fully immunised.

The data analyses show that there was an improvement in 7 out of 8 of the maternal and child health measures for New Directions organisations, compared with 4 out of 8 measures for non-New Directions organisations. The 7 measures where New Directions organisations improved were all 'process-of-care' indicators such as child health check and immunisation recorded. The only measure where New Directions organisations did not improve was for birthweight result, a health outcome measure influenced by a wide range of factors, including behavioural and lifestyle factors.

Although the nKPI data can provide useful information on the performance of organisations who receive New Directions funding compared with those who do not, the nKPI data cannot be used to evaluate program effectiveness. The improvements in New Directions organisations cannot be directly attributed to the program, as they could be due to a range of other factors not controlled for in the analyses. As more organisations participate in New Directions, baseline data will be available and analyses can be undertaken over a longer time frame, which should provide better information for program monitoring.

# Introduction

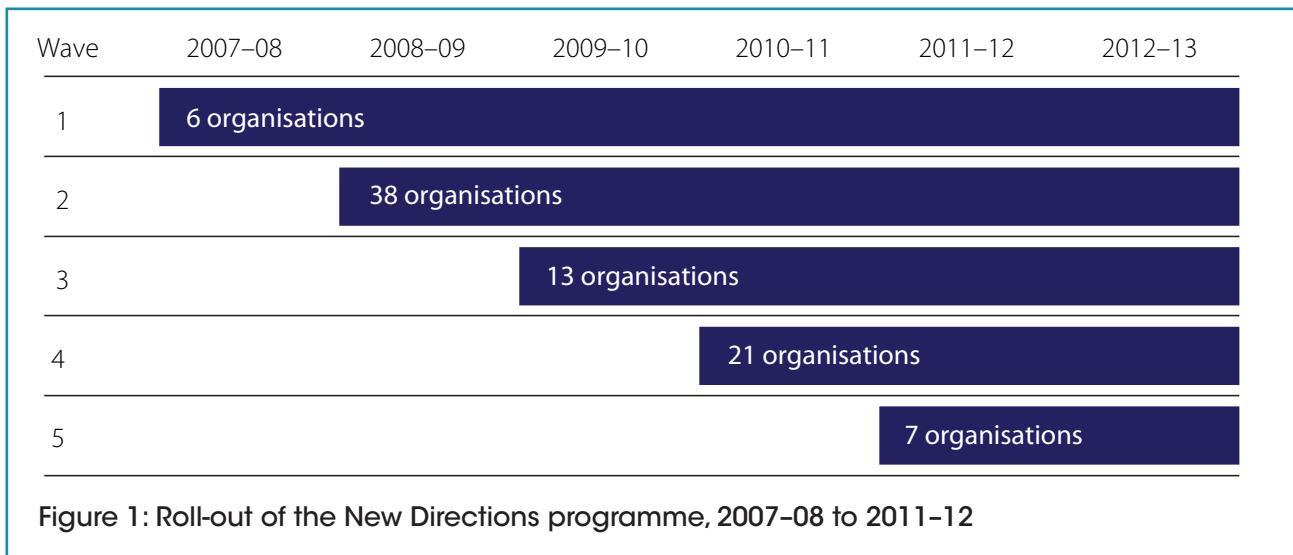
The New Directions program, funded by the Australian Government, aims to increase access to, and use of, Indigenous child and maternal health care services through the expansion of child and maternal health services and increasing the number of health professionals employed in regions of high need (Department of Health 2014). The program funds health organisations to provide the following services to Aboriginal and Torres Strait Islander families:

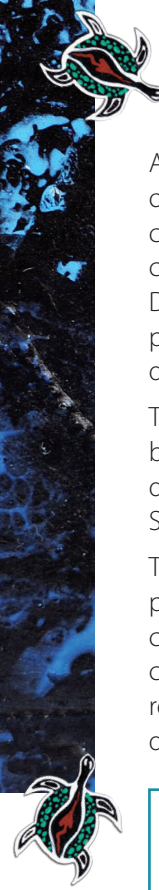
- antenatal and postnatal care
- information about baby care
- practical advice and assistance with breastfeeding, nutrition and parenting
- monitoring of developmental milestones, immunisation status and infections
- health checks for Indigenous children before they start school.

Australian Government investment in New Directions is based on international and Australian research that shows the importance of investing in the early years for children and their families for longer term improvements in health outcomes, particularly for those from disadvantaged backgrounds (Mustard 2008; AHMAC 2010). Access to high quality antenatal care and maternal health services can reduce the risk of later poor health outcomes for the mother and the baby (AIHW 2012).

New Directions funding was rolled out to 85 primary health care organisations in 5 waves over 5 years, and the Australian Government provides ongoing funding to these organisations. A targeted merit-based selection process was used to select and fund organisations to deliver New Directions services. Organisations within identified priority regions were invited to apply for funding. Applications were assessed by a panel against agreed assessment criteria and recommendations for funding made.

The first wave of New Directions funding began in 2007–08 with the funding of 6 organisations, and the second wave was in 2008–09 with 38 additional organisations funded. A further 13 organisations began in 2009–10, 21 in 2010–11 and 7 in 2011–12 (Waves 3, 4 and 5 respectively) (Figure 1).





A 2012 descriptive analysis survey of New Directions suggested that the flexibility of the program allowed organisations to develop a range of service models and to adapt activities to meet the needs of their local communities. Home visiting was seen by many organisations as a critical element of service delivery. It enabled care to be delivered to clients who would otherwise have been unlikely to access clinic-based organisations. New Directions also supported families with complex social issues affecting their capacity to engage in antenatal and postnatal care. Many families accessing the program had significant health needs and higher-than-normal risks during pregnancy (Department of Health 2014).

There was, however, no data collection specifically set up to monitor the New Directions program or to collect baseline data. But most of the organisations who receive New Directions funding provide data to the existing nKPI data collection (see Box 1). This national data collection of measures of primary health care for Aboriginal and Torres Strait Islander people contains 8 measures related to child and maternal health.

The Department and the AIHW were therefore interested in determining whether these existing measures could provide any insight into the New Directions program. If the New Directions program was improving maternal and child health service delivery and outcomes, there may be evidence of such improvements in these maternal and child health indicators. The AIHW therefore compared the results for these 8 nKPI measures for organisations who receive New Directions funding with those who do not receive New Directions funding, to see if there were any differences between the two groups.

### **Box 1: The National Key Performance Indicators (nKPIs) of Indigenous primary health care**

nKPI is a national data collection based on measures of primary health care for Aboriginal and Torres Strait Islander people. The data collection is aimed at improving both the delivery of primary healthcare, and health outcomes for Indigenous people; and to support *Closing the Gap* targets, in particular the targets for life expectancy and child mortality. The data can also be used for continuous quality improvement (CQI) purposes. The data are collected every 6 months from around 206 primary healthcare organisations that are funded by the Australian Government Department of Health to provide services primarily to Aboriginal and Torres Strait Islander people. There are 19 nKPI indicators containing 24 measures (see AIHW 2014).

# Methodology

## Data used

### Maternal and child health indicators

There are 5 national indicators that provide 8 measures of maternal and child health service delivery or outcomes relevant to the New Directions program as follows.

- **First antenatal care visit**—proportion of regular clients who are Aboriginal and/or Torres Strait Islander, who gave birth within the previous 12 months and who had gestational age recorded at their first antenatal care visit, with a result less than 13/40 weeks.
- **Birthweight recorded**—proportion of Aboriginal and/or Torres Strait Islander babies born within the previous 12 months whose birthweight had been recorded at the primary health care service.
- **Birthweight normal**—proportion of Aboriginal and/or Torres Strait Islander babies born within the previous 12 months whose birthweight results were categorised as normal (2,500 grams to less than 4,500 grams).
- **Health assessments (MBS item 715)**
  - Proportion of regular clients who are Aboriginal and/or Torres Strait Islander, aged 0–4, and who had received an MBS health assessment for Aboriginal and Torres Strait Islander people within the previous 12 months
  - Proportion of regular clients (female clients only used) who are Aboriginal and/or Torres Strait Islander, aged 25 and over, and who have received an MBS health assessment for Aboriginal and Torres Strait Islander People within the previous 24 months.
- **Recording of fully immunised children**
  - Proportion of Aboriginal and/or Torres Strait Islander children who are regular clients, aged 12 months to less than 24 months and who are ‘fully immunised’
  - Proportion of Aboriginal and/or Torres Strait Islander children who are regular clients, aged 24 months to less than 36 months and who are ‘fully immunised’
  - Proportion of Aboriginal and/or Torres Strait Islander children who are regular clients, aged 60 months to less than 72 months and who are ‘fully immunised’.

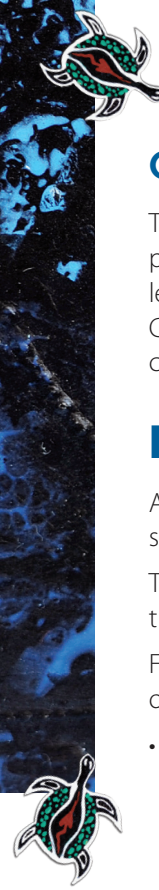
## Organisations

Organisations reporting on nKPIs include Aboriginal Community Controlled Health Organisations, organisations that are not community controlled, state and territory and local government organisations, non-government organisations, auspiced organisations and Medicare Locals. Organisations in the nKPI collection were categorised as New Directions or non-New Directions organisations in order to make comparisons between the two groups.

How an organisation is defined and counted for nKPI purposes can, however, differ from how it is counted with respect to New Directions funding. The 78 organisations who received New Directions funding in waves 1 to 4 were matched to those in the nKPI collection to determine which nKPI services were New-Directions-funded. There were 10 organisations that did not provide nKPI data (Table A3). The remaining 68 New Directions organisations represented 77 services who also reported against the nKPIs. The comparison group of non-New Directions organisations comprised 123 organisations who also reported in the nKPI data collection but who had not received any New Directions funding.

Organisations in waves 1 to 4 were grouped in order to get sufficient numbers to enable some statistical analyses and comparison between groups. There were not enough New Directions organisations to enable comparisons of organisations between earlier and later waves of the program. The 7 organisations that received funding in Wave 5 were excluded from the analyses because they had participated in the program for a relatively short period—starting during the 2011–12 financial year—and changes to organisational practices were less likely to be evident in their data. (See the Appendix A for more information and a list of New Directions organisations included and excluded.)





## Clients

The population of interest for each measure was the 'regular client' population. A regular client is defined as a person who has an active medical record—that is, a client who attended the primary healthcare organisation at least 3 times in the last 2 years. This definition, while nationally consistent and in line with the Royal Australian College of General Practitioners definition of a patient with an active medical record, has limitations—for example a client who attends multiple health organisations on a regular basis may be counted more than once.

## Data analyses

An overview and detailed data for each of the 8 maternal and child health measures are provided in the next section. For each measure, data on the number of clients and organisations are also provided.

The data have been analysed in relation to the clients of organisations that received New Directions funding and those that did not.

For each measure, two types of analysis are presented for New Directions organisations and non-New Directions organisations:

- The proportion of organisations that achieved the particular measure for more than half of their clients—for example, for antenatal care, the measure criterion was the proportion of organisations where more than half of women attended their first antenatal visit before 13 weeks of pregnancy, while for immunisation it was the proportion of organisations where more than half of all children were recorded as being fully immunised. This methodology was used in order to provide a benchmark for comparing the performance of the two groups of organisations against each indicator measure.
- A graph showing organisation results for each reporting period, broken down into quintiles for each measure—for example, for the 'antenatal visits before 13 weeks of pregnancy' measure, the graph shows the proportions of organisations where: no women attended before 13 weeks; less than 25% attended; 25% to less than 50% attended; 50% to less than 75% attended; and 75% or more attended.

It should be noted that not all organisations reported against all indicators, and not all organisations provided valid data for all indicators in all reporting periods. To enable comparisons between reporting periods, only organisations with valid data in all reporting periods were included in the analysis for each measure. This means the total number of organisations contributing data varied from measure to measure (Table 2).

**Table 1: Organisations providing valid nKPI data for each maternal and child health measure**

Collection period	Antenatal visit before 13 weeks		Birthweight recorded		Birthweight result		Child health assessment		Adult health assessment		Childhood immunisation (3 measures)	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>New Directions organisations</b>												
December 2012	n.a.	n.a.	63	81.8	n.a.	n.a.	56	72.7	56	72.7	n.a.	n.a.
June 2013	68	88.3	65	84.4	64	83.1	64	83.1	64	83.1	71	92.2
December 2013	66	85.7	73	94.8	72	93.5	68	88.3	69	89.6	68	88.3
<b>All periods</b>	<b>64</b>	<b>83.1</b>	<b>61</b>	<b>79.2</b>	<b>62</b>	<b>80.5</b>	<b>52</b>	<b>67.5</b>	<b>52</b>	<b>67.5</b>	<b>66</b>	<b>85.7</b>
<b>Non-New Directions organisations</b>												
December 2012	n.a.	n.a.	89	72.4	n.a.	n.a.	85	69.1	85	69.1	n.a.	n.a.
June 2013	113	91.9	99	80.5	99	80.5	118	95.9	116	94.3	118	95.9
December 2013	111	90.2	119	96.7	118	95.9	119	96.7	118	95.9	118	95.9
<b>All periods</b>	<b>109</b>	<b>88.6</b>	<b>87</b>	<b>70.7</b>	<b>95</b>	<b>77.2</b>	<b>82</b>	<b>66.7</b>	<b>82</b>	<b>66.7</b>	<b>115</b>	<b>93.5</b>

n.a. Not available.

## Limitations of the analyses

There are a number of limitations to the analyses. Firstly there were no baseline data available before the New Directions program was implemented—the first nKPI data were collected some time after the program commenced in most organisations. The nKPI data are also only available for 2 or 3 time points, spanning 6 to 12 months from December 2012 to December 2013, making comparisons at this point in time and determining trends somewhat difficult.

The analyses were limited by the existing indices for which data were available. While some nKPI data may provide insights into achievement against some of the objectives of the New Directions program, they do not measure other key objectives of the program—for example, breastfeeding rates.

In addition, the original selection of organisations for New Directions funding was based partly on need, so New Directions organisations may initially have had poorer performance compared with non-New Directions organisations if they had been measured at the time of beginning funding against relevant nKPIs. Consequently these organisations may have had much bigger improvements since beginning funding than is apparent in the available nKPI data. There is no way of knowing whether these organisations started from a lower baseline or not due to lack of baseline data. There may also be underlying differences between the two groups of organisations that are not visible from the available data but could impact on nKPI results.

The nKPIs can be used for continuous quality improvement purposes at the organisational level. Therefore, the performance of organisations not participating in New Directions may also be expected to improve over time for these indicators. This may mask relative improvements in New Directions organisations compared with other nKPI health organisations.

There are also data issues within the nKPI collection that impact on the interpretation of these results (see AIHW 2014 for details). These issues include:

- The number of organisations providing data has increased over time.
- The number of organisations that provide valid data is different for different measures.
- There may be double-counting of clients at multiple organisations, especially those in very remote areas.
- The size of organisations varies considerably and the organisation percentages are based on client sets that can range from very small to very large. Where an organisation is small, a small change in the numerator can have a large impact on the proportion for that organisation.



# Results of the analyses

## Overview

An overview of the results of the analyses for all 8 child and maternal health measures used is in the table and commentary below.

More detailed analyses for each measure are reported in the following sections.

**Table 2: Results of all maternal and child health measures: New Directions and non-New Directions organisations**

Measure/criterion	% of New Directions organisations		% of non-New Directions organisations		Indicator improved over the reporting period	
	1st reporting period	Last reporting period	1st reporting period	Last reporting period	ND orgs	non-ND orgs
First antenatal visit before 13 weeks >half of women	18.9	20.8	17.1	18.6	✓	✓
Birthweight recorded >half of babies*	63.3	70.0	48.7	56.6	✓	✓
Birthweight result normal >half of babies	98.4	98.4	95.6	94.1	x	x
Child health assessment >half of children*	7.8	21.6	11.0	11.0	✓	x
Adult health assessment >half of women*	26.9	36.5	25.6	36.6	✓	✓
Immunisation aged 1 recorded >half of babies	72.7	75.8	81.1	77.4	✓	x
Immunisation aged 2 recorded >half of children	72.3	75.4	77.3	75.4	✓	x
Immunisation aged 3 recorded >half of children	61.9	66.7	65.7	66.7	✓	✓

\* Denotes indicators with data for 3 reporting periods: December 2012, June and December 2013. All other indicators have data for 2 reporting periods June and December 2013.

In relation to the standard used (whether organisations achieved the particular measure for more than half of their clients), there was an improvement in 7 out of 8 measures for New Directions (ND) organisations compared with 4 out of 8 measures for non-New Directions (non-ND) organisations. The improvements for New Directions organisations were largest for Birthweight recorded (from 63 to 70% of organisations), child health assessment (8% to 22%) and adult health assessment for women (27% to 37%). For non-New Directions organisations the improvements were largest for Birthweight recorded (from 49% to 57% of organisations) and adult health check for women (26% to 37%).

The 7 measures where New Directions organisations improved were all for 'process-of-care' indicators. These are measures of organisational processes and can therefore be used to assess performance of the organisation. The only measure where New Directions organisations did not improve was Birthweight result, an outcome measure influenced by a wide range of factors in addition to health care.



## First antenatal visit

### Headline result

In December 2013, more than half of women attended their first antenatal visit before 13 weeks of pregnancy at 21% of New Directions organisations, compared with 19% of non-New Directions organisations.

- In June 2013 more than half of women attended their antenatal visit before 13 weeks of pregnancy at 19% of ND funded organisations and 17% of non-ND funded organisations.
- In December 2013 this proportion was 21% of ND funded organisations and 19% of non-ND funded organisations.

**Table 3: Organisations with more than half of women attending their first antenatal visit before 13 weeks<sup>(a)</sup>**

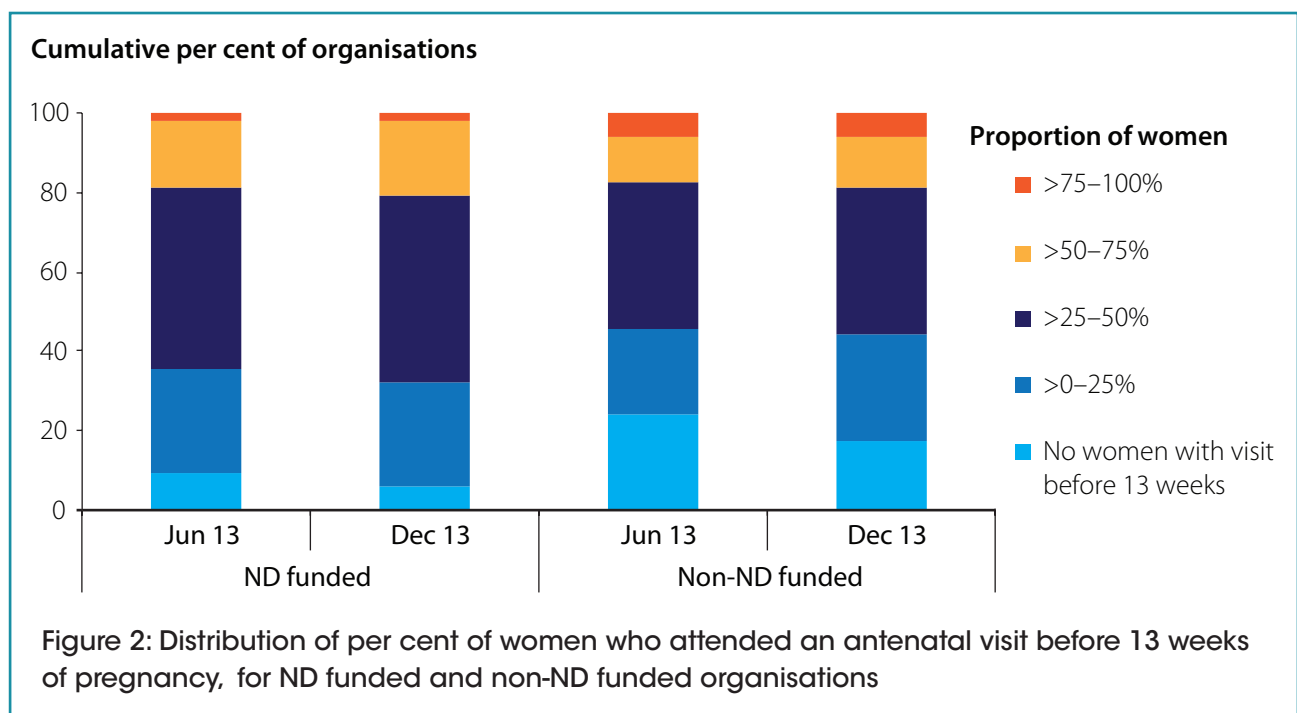
Period	No. of clients in category		No. of organisations in category		% of all organisations <sup>(b)</sup>	
	ND	Non-ND	ND	Non-ND	ND	Non-ND
June 2013	495	162	10	12	18.9	17.1
December 2013	560	413	11	13	20.8	18.6

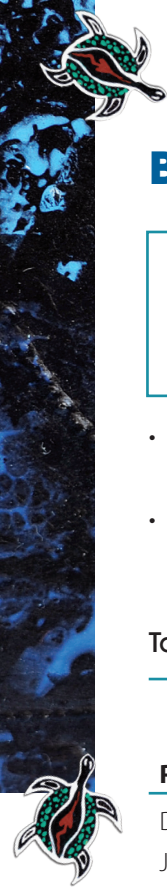
(a) This indicator excludes antenatal care received at other services and therefore may under state the proportion of women receiving care in the first trimester.

(b) Includes organisations that provided valid data and with at least one Indigenous regular client who gave birth in the last 12 months.

Note: Data were available for two collection periods—June 2013 and December 2013.

- The proportion of organisations where no women attended an antenatal visit before 13 weeks of pregnancy was 9% in June 2013 and 7% in December 2013 for ND funded organisations, while for non-ND funded organisations the proportions were 24% and 17% respectively.





## Birthweight recorded by the organisation

### Headline result

In December 2013 more than half of babies had their birthweight recorded in the previous year at 70% of New Directions organisations compared with 57% of non-New Directions organisations.

- In December 2012, more than half of babies had their birthweight recorded in the previous year at 63% of ND funded organisations and 49% of non-ND funded organisations.
- This proportion increased to 70% of ND funded organisations in December 2013, and 57% of non-ND funded organisations.

Table 4: Organisations where more than half of the babies had their birthweight recorded

Period	No. of clients in category		No. of organisations in category		% of all organisations <sup>(a)</sup>	
	ND	Non-ND	ND	Non-ND	ND	Non-ND
December 2012	1,927	1,205	38	37	63.3	48.7
June 2013	2,318	1,430	44	38	73.3	50.0
December 2013	2,139	1,388	42	43	70.0	56.6

(a) Includes organisations that provided valid data and with at least one Indigenous baby born.

Note: Data were available for three collection periods—December 2012, June 2013 and December 2013.

- The proportion of organisations where no babies had their birthweight recorded in the previous year was 3% in December 2012 and 0% in December 2013 for ND funded organisations, while for non-ND funded organisations the proportions were 17% and 9% respectively.

### Cumulative per cent of organisations

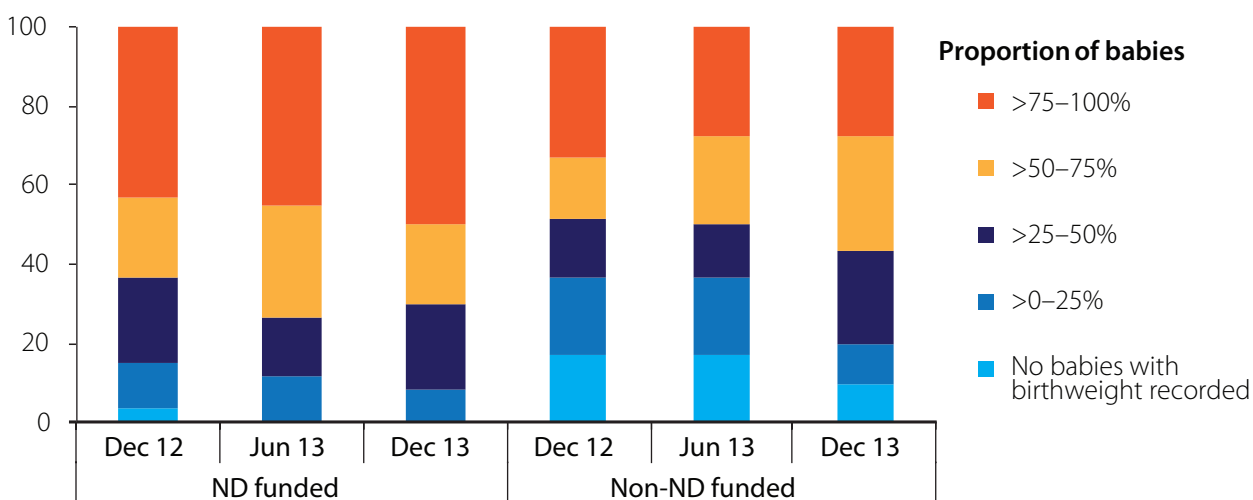


Figure 3: Distribution of per cent of babies whose birthweight was recorded, for ND funded and non-ND funded organisations

# Birthweight result

## Headline result

In December 2013 more than half of the babies born in the previous year were of normal birthweight at 98% of New Directions organisations compared with 94% of non-New Directions organisations.

- In June 2013, at 98% of ND funded organisations and 96% of non-ND funded organisations more than half of babies born in the previous year were of normal birthweight.
- In December 2013, this proportion was 98% at ND funded organisations and 94% at other organisations.

**Table 5: Organisations where more than half of babies born were of normal birthweight**

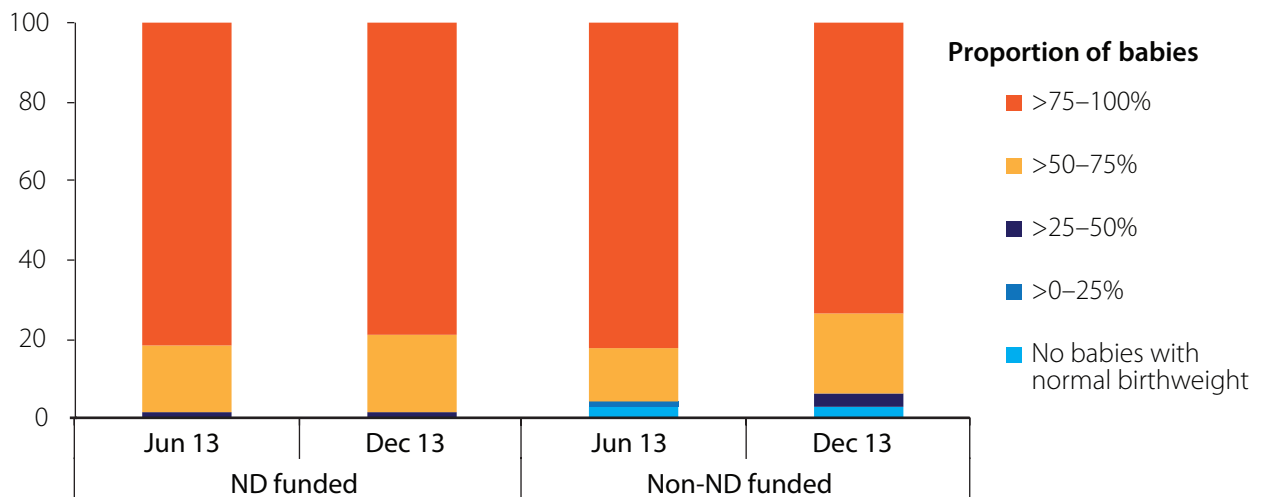
	No. of clients in category		No. of organisations in category		% of all organisations <sup>(a)</sup>	
	ND	Non-ND	ND	Non-ND	ND	Non-ND
June 2013	2,078	1,395	60	65	98.4	95.6
December 2013	1,997	1,399	60	64	98.4	94.1

(a) Includes organisations that provided valid data and with at least 1 Indigenous baby of a regular client.

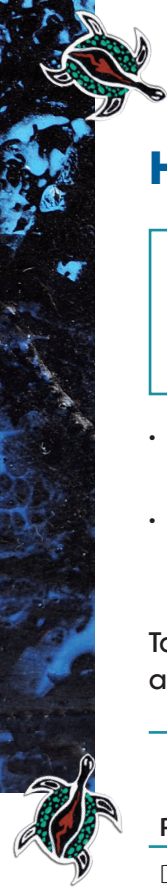
Note: Data were available for two collection periods—June 2013 and December 2013.

- In June 2013 there were no ND organisations and only 2 non-ND organisations with no babies with normal birthweight.

## Cumulative per cent of organisations



**Figure 4: Distribution of per cent of babies of normal birthweight, for ND funded and non-ND funded organisations**



## Health assessment: children aged 0–4 years

### Headline result

In December 2013 more than half of children aged 0–4 years had an MBS health assessment in the previous year in 22% of New Directions organisations compared with 11% of non-New Directions organisations.

- In December 2012, more than half of children aged 0–4 years had a health assessment in the previous year in 8% of ND funded organisations and 11% of non-ND funded organisations.
- This proportion increased to 22% in December 2013 in ND funded organisations and remained the same (11%) in non-ND funded organisations.

**Table 6: Organisations where more than half of children aged 0–4 years had an MBS health assessment**

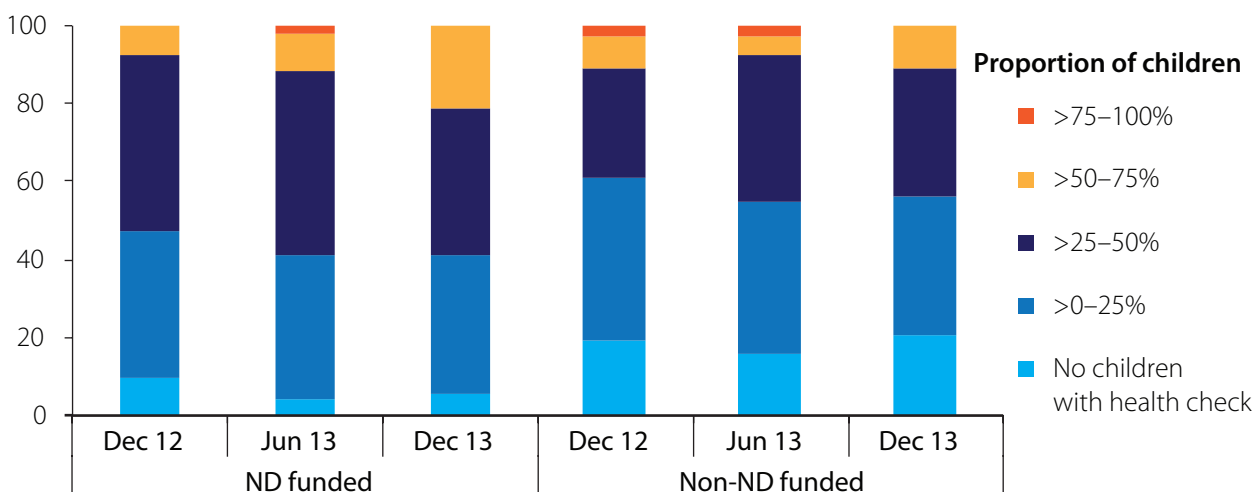
Period	No. of clients in category		No. of organisations in category		% of all organisations <sup>(a)</sup>	
	ND	Non-ND	ND	Non-ND	ND	Non-ND
December 2012	675	924	4	9	7.8	11.0
June 2013	1,053	338	6	6	11.8	7.3
December 2013	1,487	1,271	11	9	21.6	11.0

(a) Includes organisations that provided valid data and with at least one Indigenous baby of a regular client.

Note: Data were available for three collection periods—December 2012, June 2013 and December 2013.

- The proportion of organisations where no children had a health assessment was 10% in December 2012 and 6% in December 2013 for ND funded organisations, while for non-ND funded organisations the proportions were 20% and 21% respectively.

### Cumulative per cent of organisations



**Figure 5: Distribution of per cent of children who had a health check, for ND funded and non-ND funded organisations**

## Health assessment: women aged 25–44 years

### Headline result

In December 2013 the proportion of services where more than half of women aged 25–44 years had an MBS health assessment in the previous year was 37% for both New Directions funded and non-New Directions funded organisations.

- In December 2012 more than half of women aged 25–44 years had a health assessment at 27% of ND funded organisations, and 26% of non-ND funded organisations.
- In December 2013 this proportion increased to 37% for both ND and non-ND funded organisations.

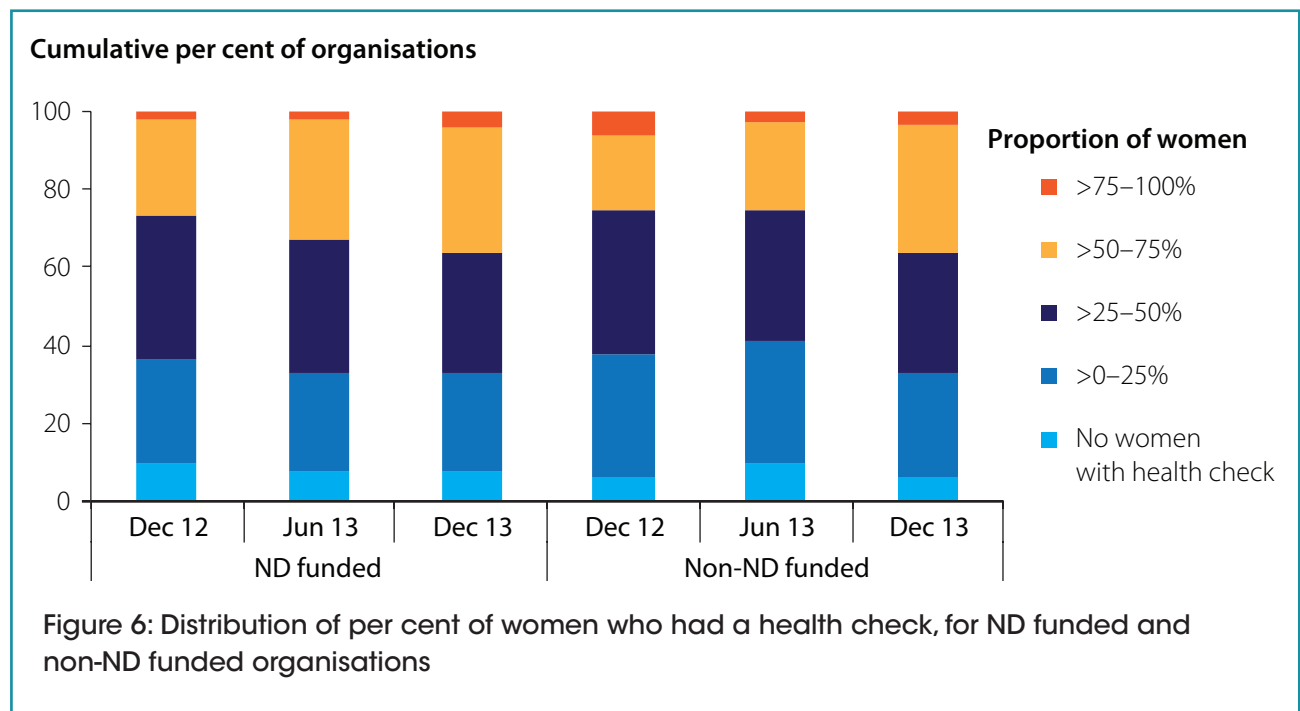
**Table 7: Organisations where more than half of women aged 25–44 years had an MBS health assessment**

Period	No. of clients in category		No. of organisations in category		% of all organisations <sup>(a)</sup>	
	ND	Non-ND	ND	Non-ND	ND	Non-ND
December 2012	3,045	2,044	14	21	26.9	25.6
June 2013	4,763	3,797	17	21	32.7	25.6
December 2013	5,388	5,046	19	30	36.5	36.6

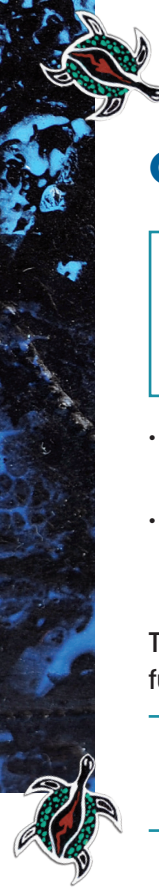
(a) Includes organisations that provided valid data and with at least one woman regular client.

Note: Data were available for three collection periods—December 2012, June 2013 and December 2013.

- The proportion of ND funded organisations where no women had a health assessment was 10% in December 2012 and 8% in December 2013, while for non-ND funded organisations it was 6% in both periods.







# Child immunisation at 1 year

## Headline result

In December 2013 more than half of children aged 1 year were recorded as being fully immunised at 76% of New Directions organisations compared with 77% of non-New Directions organisations.

- In June 2013 more than half of children aged 1 were recorded as being fully immunised at 73% of ND funded organisations and 81% of non-ND funded organisations.
- In December 2013 this proportion was 76% of ND funded organisations, and 77% of non-ND funded organisations.

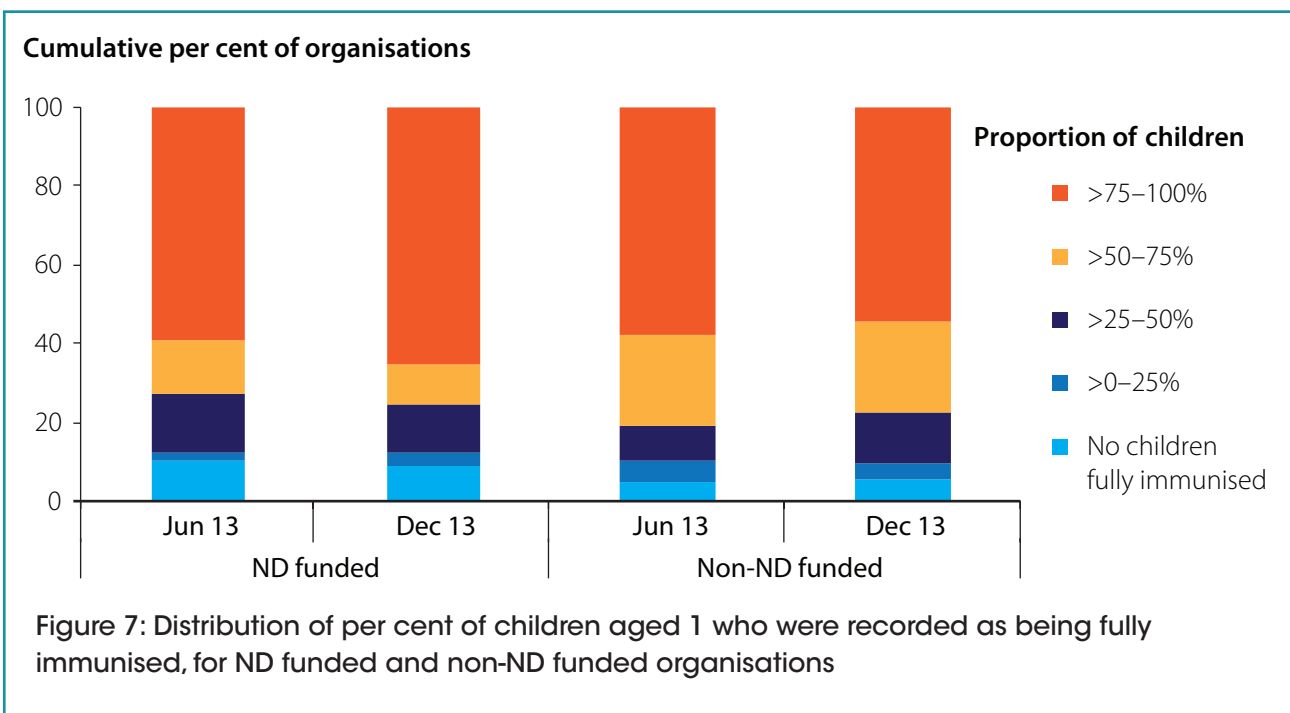
**Table 8: Organisations where more than half of children aged 1 year were recorded as being fully immunised**

Period	No. of clients in category		No. of organisations in category		% of all organisations <sup>(a)</sup>	
	ND	Non-ND	ND	Non-ND	ND	Non-ND
June 2013	2,307	2,280	48	86	72.7	81.1
December 2013	2,494	2,343	50	82	75.8	77.4

(a) Includes organisations that provided valid data and with at least one child aged 1 year.

Note: Data were available for two collection periods—June 2013 and December 2013.

- The proportion of ND funded organisations where no children aged 1 were recorded as being fully immunised was 11% in June 2013 and 9% in December 2013, while for non-ND funded organisations the proportions were 5% and 6% respectively.



# Child immunisation at 2 years

## Headline result

In December 2013 more than half of children aged 2 years were recorded as being fully immunised at 75% of New Directions organisations compared with 77% of non-New Directions organisations.

- In June 2013, at 72% of ND funded organisations and 77% of non-ND funded organisations more than half of children aged 2 were recorded as being fully immunised.
- This proportion was 75% at both ND funded organisations and non-ND funded organisations in December 2013.

**Table 9: Organisations where more than half of children aged 2 years were recorded as being fully immunised**

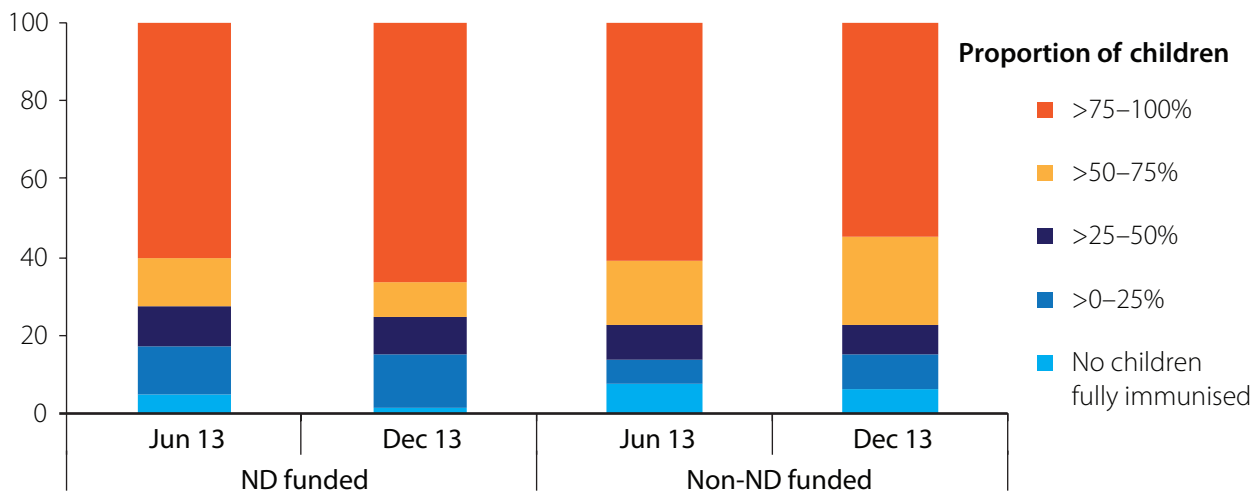
Period	No. of clients in category		No. of organisations in category		% of all organisations <sup>(a)</sup>	
	ND	Non-ND	ND	Non-ND	ND	Non-ND
June 2013	2,395	2,421	47	85	72.3	77.3
December 2013	2,367	2,350	49	85	75.4	75.4

(a) Includes organisations that provided valid data and with at least one child aged 2 years.

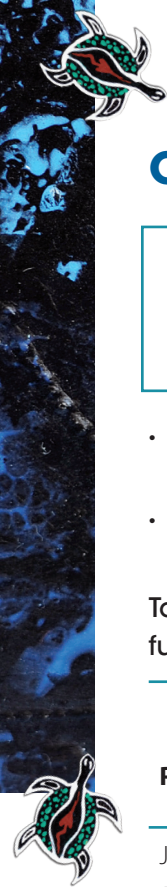
Note: Data were available for two collection periods—June 2013 and December 2013.

- The proportion of organisations where no children aged 2 were recorded as being fully immunised was 5% in June 2013 and 2% in December 2013 for ND funded organisations, while for non-ND funded organisations the proportions were 7% and 6% respectively.

## Cumulative per cent of organisations



**Figure 8: Distribution of per cent of children aged 2 who were recorded as being fully immunised, for ND funded and non-ND funded organisations**



## Child immunisation at 5 years

### Headline result

In December 2013 more than half of children aged five years were recorded as being fully immunised at 67% of both New Directions and non-New Directions funded organisations.

- In June 2013, more than half of children aged 5 were recorded as being fully immunised at 62% of ND funded organisations and 66% of non-ND funded organisations.
- In December 2013 this proportion was 67% at both ND funded and non-ND organisations.

Table 10: Organisations where more than half of children aged 5 years were recorded as being fully immunised

Period	No. of clients in category		No. of organisations in category		% of all organisations <sup>(a)</sup>	
	ND funded	Non-ND	ND funded	Non-ND	ND funded	Non-ND
June 2013	1,843	1,871	39	71	61.9	65.7
December 2013	1,827	1,985	42	72	66.7	66.7

(a) Includes organisations that provided valid data and with at least one Indigenous baby of a regular client.

Note: Data were available for two collection periods—June 2013 and December 2013.

- The proportion of organisations where no children aged 5 were recorded as being fully immunised was 8% in December 2013 at ND funded organisations and 9% at non-ND organisations.

### Cumulative per cent of organisations

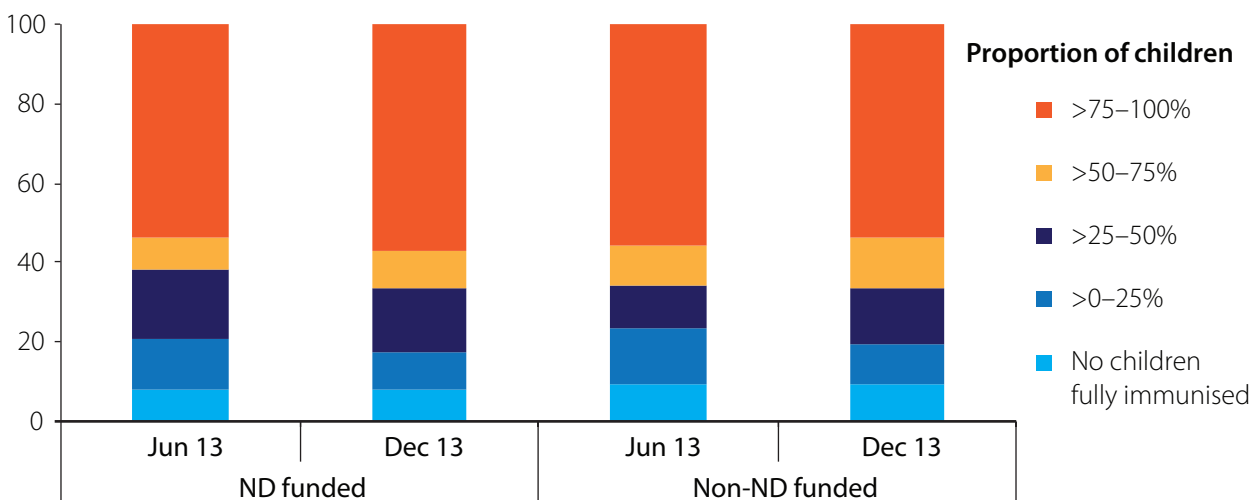


Figure 9: Distribution of per cent of children aged 5 who were recorded as being fully immunised, for ND funded and non-ND funded organisations

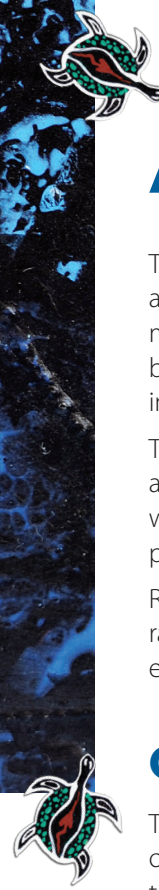
# Conclusion

The analyses showed improvements against 7 out of 8 of the maternal and child health measures for New Directions organisations, compared with 4 out of 8 measures for non-New Directions organisations. The 7 measures where New Directions organisations improved were all for 'process-of-care' indicators such as child health check and immunisation recorded. Process measures are more easily improved by organisations, as they have more control over them. The only measure where New Directions organisations did not improve was for birthweight result, a health outcome measure influenced by a wide range of factors, including behavioural and lifestyle factors.

These results relate to relatively small numbers of organisations over a short time period, and have not been tested for statistical significance. It will be important to monitor the achievements of the 2 groups of organisations over a longer period to see if these trends continue.

Although nKPI data can provide useful information on organisations who receive New Directions funding compared with those who do not, the nKPI data cannot be used to evaluate program effectiveness. The improvements in New Directions organisations cannot be directly attributed to the program, as they could be due to a range of other factors that are not controlled for in the analyses. As more organisations participate in New Directions, baseline data will be available and analysis can be undertaken over a longer time frame which should provide better information for program monitoring.





## Appendix A: The nKPI data

The nKPI data are collected to improve both the delivery of primary health care and health outcomes for Aboriginal and Torres Strait Islander people, and to support *Closing the Gap* targets. There are 19 nKPI indicators containing 24 measures. The nKPIs include 8 measures that relate to the aims of the New Directions program: first antenatal visit, birthweight recorded; birthweight result; health assessment for 0–4 year olds; health assessment for women; and 3 immunisation measures (whether 1, 2 and 5 year olds were recorded as fully immunised).

There are limitations in the nKPI data that should be taken into account when reading this report. For example, data are captured as part of service delivery processes and clients who attend more than one organisation regularly will be double-counted. More information about data collection processes and issues associated with these are presented in the nKPI first national results report (AIHW 2014).

Reporting against the nKPIs is comparatively new for organisations. Some results may reflect data collection rather than service delivery issues. Findings should also be understood in the context of the operating constraints experienced by some organisations.

### Organisations contributing nKPI data

The number of organisations providing nKPI data increased from 90 in June 2012 to 207 in December 2013. All organisations that report nKPIs are funded by the Australian Government Department of Health to provide services to Aboriginal and Torres Strait Islander people.

Organisations reporting include Aboriginal Community Controlled Health Organisations, other non-government organisations that are not community controlled, state and territory and local government organisations, auspiced organisations and Medicare Locals. Organisations may report nKPI data directly to the OCHREStreams online portal, or through their fundholding arrangements.

Organisations covered by this report are as defined in the nKPI data collection. They report their nKPI data as a distinct entity. This definition of 'organisation' is different to that used by the Department of Health for the purposes of funding, where one funded organisation may have multiple organisations reporting nKPI data, or in one case 2 funded organisations reported as one for nKPI (Table A1).

The Department of Health provides New Directions funding to 85 organisations, of which 75 (88%) provide data for the nKPI collection. The analyses in this report, however, only included the 68 New Directions organisations funded in waves 1 to 4 (Table A1). The 7 organisations receiving funding in Wave 5 were excluded from the analyses (Table A2). This was because they had participated in the program for a relatively short period and changes to organisational practices were less likely to be evident in their data. All other nKPI organisations were classified as non-New Directions. The 10 New Directions funded organisations not reporting nKPI data are listed in Table A3.

## Data definitions and issues

### Adult health assessment—women

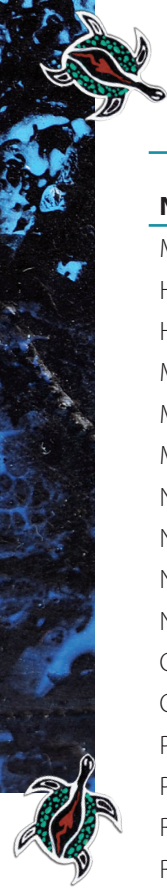
For the adult health assessment measure this report looks only at women aged 25–44, using this as a proxy for women participating in the program. This is an imperfect measure because some women who do participate in New Directions are not included in the measure and some women who do not participate are included. For example some women under 25 years of age might be taking part in the New Directions program but are excluded from this measure. Some women aged 25–44 who were included in the measure may not be mothers who participated in New Directions. More information on nKPI indicators, including data quality issues and limitations can be found below, and in the nKPI first national results report (AIHW 2014).

## Immunisation data

Australian Childhood Immunisation Register (ACIR) 2011 records indicate that about 90% of Aboriginal and Torres Strait Islander children are fully immunised nationally. This is broadly similar to the immunisation rate for non-Indigenous children. However, comparison with nKPI 2013 data indicates that primary healthcare records are capturing far fewer cases of fully immunised children (by around 20 percentage points). This suggests there are data quality issues with the immunisation data collected from primary healthcare organisations. Anecdotal evidence indicates that some organisations may not rely on their internal Patient Information Record Systems to track immunisation status, instead possibly relying on the ACIR. Also, in some instances, the primary healthcare providers participating in the nKPI collection may not be the only or major immunisation provider. This would reduce the priority that some organisations may give to maintaining immunisation status information within their Patient Information Record System.

**Table A1: New Directions organisations funded in waves 1-4 reporting nKPI data**

<b>New Directions funded organisations</b>	<b>Equivalent no. of nKPI orgs</b>
Aboriginal and Torres Strait Islander Community Health Service Brisbane Ltd	1
Aboriginal and Torres Strait Islander Community Health Service Mackay Ltd	1
Aboriginal Medical Service Western Sydney Cooperative	1
Ampilatwatja Health Centre Aboriginal Corporation	1
Apunipima Cape York Health Council Aboriginal Corporation	1
Awabakal Newcastle Aboriginal Cooperative Limited	1
Ballarat and District Aboriginal Cooperative	1
Bega Garabirringu Health Service	1
Bendigo and District Aboriginal Cooperative	1
Biripi Aboriginal Corporation Medical Centre	1
Bullinah Aboriginal Health Service Aboriginal Corporation	1
Central and North West Qld Medicare Local	1
Central Australian Aboriginal Congress	1
Cunnamulla Aboriginal Corporation for Health	1
Danila Dilba Health Services	1
Darling Downs Shared Care (T/A Carbal Medical Centre)	1
Durri Aboriginal Corporation Medical Service – Kempsey	
Durri Aboriginal Corporation Medical Service – Nambucca/Bowraville	1
Flinders Island Aboriginal Association	1
Griffith Aboriginal Medical Service Incorporated	1
Gurriny Yealamucka Health Services Aboriginal Corporation	1
Illawarra Shoalhaven Local Health District	1
Inala Indigenous Health Service (auspiced by Queensland Health)	1
Institute for Urban Indigenous Health	1
Kambu Medical Centre (initial funding to Ipswich West Moreton Division of General Practice)	1
Katherine West Health Board Aboriginal Corporation	1
Kimberley Aboriginal Medical Service	1
Laynhapuy Homelands Association Incorporated	1
Department of Health, Northern Territory (Wadeye, Maningrida)	4
Marwarnkarra Health Service Aboriginal Corporation	1
Miwatj Health Aboriginal Corporation—Ngalkanbuy Clinic	1



<b>New Directions funded organisations</b>	<b>Equivalent no. of nKPI orgs</b>
Miwatj Health Aboriginal Corporation—Nhulunbuy Clinic	1
Hunter New England Local Health District—Moree/Gwydir	1
Hunter New England Local Health District—Armidale, Cessnock, Narrabri	3
Mount Isa Aboriginal Controlled Community Health Service (Gidgee Healing)	1
Mulungu Aboriginal Corporation Medical Centre	1
Murray Valley Aboriginal Cooperative	1
New England Medicare Local	3
Ngaanyatjarra Health Service	1
Ngunytju Tjitji Pirni Aboriginal Corporation	1
North Coast NSW Medicare Local	2
Orange Aboriginal Health Service	1
Ord Valley Aboriginal Health Service	1
Pintubi Homelands Health Service	1
Port Lincoln Aboriginal Health Service Inc	1
Riverina Medical and Dental Aboriginal Corporation	1
Royal Hospital for Women—auspiced by South Eastern Sydney Local Health District	1
South Coast Women's Health and Welfare Aboriginal Corporation (Waminda)	1
South Western Sydney Local Health District	1
Sydney Local Health District	1
South Eastern Sydney and Illawarra Areas Health Service	1
Tasmanian Aboriginal Centre (South Region)	1
Tasmanian Aboriginal Centre (North West Region)	1
Tharawal Aboriginal Corporation	1
Tobwabba Aboriginal Medical Service	1
Townsville/MacKay Medicare Local	1
Tullawon Health Service	1
Werin Medical Clinic	1
Willowra, Yuendumu, Nyirripi Health Service (WYN)— auspiced by NT Department of Health	3
Winnunga Nimmityjah Aboriginal Health Service	1
Wirraka Maya Health Service	1
Wuchopperen Health Services Ltd	1
Wurli Wurlinjang Health Service	1
Yerin Aboriginal Health Service	1
Yura Yungi Medical Service	1
Hunter New England Local Health District—Lake Macquarie	1
Mamu Health Service	1
Sunrise Health Service Aboriginal Corporation	1

**Table A2: Services in New Directions Wave 5, not included in analyses**

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<b>New Directions funded organisation</b>
Department of Health, Northern Territory, NT South West Corner
Mildura Aboriginal Corporation
Mungabareena Aboriginal Corporation
Paupiyala Tjarutja Aboriginal Corporation
Western Australian Country Health Service (Wheatbelt)
Torres Strait —Northern Peninsula Hospital and Health Service
Puntukurnu Aboriginal Medical Service

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**Table A3: New Directions funded organisations not reporting nKPI data**

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<b>No.</b>	<b>New Directions funded organisation</b>
1	Mercy Public Hospitals Incorporated
2	Mookai Rosie Bi-Bayan
3	South Eastern Sydney and Illawarra Area Health Service (SE Sydney LHD)
4	Western Arrente Health Aboriginal Corporation —auspiced by CAAC
5	Circular Head Aboriginal Corporation
6	Country Health SA Local Health Network (Port Augusta)
7	Department of Health and Human Services
8	Western Australian Country Health Service (Midwest) — Geraldton <sup>(a)</sup>
9	Western Australian Country Health Service (Midwest)—Carnarvon Hospital <sup>(a)</sup>
10	Country Health SA Local Health Network (Ceduna) <sup>(a)</sup>

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(a) Reported for the first time in June 2014.





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This report uses the maternal and child health measures in the national Key Performance Indicators on Indigenous primary health care to provide insights into the New Directions Mothers and Babies Services program. The analyses found that there was an improvement in 7 out of 8 of these measures in organisations receiving New Directions funding.

