

# 1 Introduction

The Northern Territory Emergency Response (NTER) was announced by the former Australian Government on 21 June 2007 in response to the *Little children are sacred* report by the NT Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse. The NTER involved a wide range of measures that are designed to protect children and make communities safe, as well as create a better future for Aboriginal people in the Northern Territory (FAHCSIA 2009).

Continuing Australian and Northern Territory Government commitment to a number of the measures commenced under the NTER is set out in the Closing the Gap in the Northern Territory National Partnership Agreement, signed in July 2009. The Agreement commits the NTER to a 3-year development phase and includes:

- continuation of the expanded primary health care services initiatives
- providing ear and hearing services, in particular, the completion of Ear, Nose and Throat specialist care
- continuing follow-up dental care for children
- substantially strengthening the Mobile Outreach Service to address child abuse-related trauma (not included in this report).

The CHCI was one component of the health-related measures under the NTER. It included:

- Child Health Check teams deployed by the Australian Government during 2007–08
- funding for the Northern Territory Government Department of Health and Families (NT DHF) to provide CHCs, follow-up primary health care (PHC) and follow-up ear health and dental health services
- funding for Aboriginal Community Controlled Health Organisations (ACCHOs) to provide Child Health Checks, follow-up primary health care and, in a limited number of locations, follow-up dental health services
- capital works to provide additional clinic and staff accommodation.

The CHCI was initially focused on the roll-out of CHCs, and subsequently evolved into a program of follow-up service delivery (phase 2). From 1 July 2008, implementation of the longer term responses to Indigenous health needs in the NT began with the Expanding Health Service Delivery Initiative (phase 3). Although the initial NTER CHCs were provided by teams of doctors and nurses recruited and deployed by the Australian Government, from late 2007 the CHCs were increasingly integrated with the delivery of follow-up services provided by the NT DHF and ACCHOs.

The follow-up data were collected by staff of the NT DHF and ACCHOs as part of the delivery of those follow-up services. This occurred under tight timelines and with competing service delivery demands. It should be noted that the roll-out of the CHCs and the follow-up services did not commence in all regions at the same time – the initial focus was Central Australia and then the Top End, which influenced the extent of data collection and service delivery across regions.

The AIHW is undertaking the data management, analysis and reporting of information collected as part of the CHCI. To do so, the AIHW has created four data collections:

- the Child Health Check data collection
- the Chart Review data collection
- the Audiology data collection

- the Dental data collection.

The data collection forms used by health services to record information for these collections were created by the Department of Health and Ageing (DoHA) in consultation with the NT DHF, the Aboriginal Medical Services Alliance of the Northern Territory (AMSANT) and the AIHW.

In May 2008, the first progress report on the CHCI data was released (DoHA 2008a). This report presented results from the analysis of data from CHCs undertaken from July 2007 to mid-May 2008. No follow-up data were available for inclusion in that report. In December 2008, a second progress report containing information from all four data collections was released, including updated information on the outcomes of the CHCs and details on the key findings from the three follow-up collections (DoHA & AIHW 2008b). The December 2008 report covered the period between July 2007 and mid-October 2008.

This report presents information from the NTER CHCI data collections over the period from 10 July 2007 to 30 June 2009 (with the exception of the Chart Review collection, where information is presented up to 2 November 2009). It presents the most recent information on children's health conditions based on their latest CHCs, audiology checks and dental checks. In addition, because a number of children have received more than one CHC since last year, changes in health conditions over time are able to be traced by comparing information from their first check with their most recent check. This report also provides updated information on the follow-up care that was provided to children who received referrals at their CHC.

This introduction presents background information about the CHCI data collection including an overview of their content and some discussion of data limitations affecting interpretation of findings.

## **1.1 Measurement of the coverage of Child Health Checks**

When measuring the 'coverage' or proportion of children who have received a CHC, two figures are important. The first is the estimated population of children aged 15 years or less living in the NTER prescribed areas. The initial figure used in May 2008 analyses was 17,182 children. However, based on advice from the Australian Bureau of Statistics (ABS), this estimate was revised to 16,259 after the first progress report was published, and this figure was used for the second progress report. It is expected that this population may have been changed since then as new children without a CHC are coming into the population and older children with a CHC are moving out. However, because it is difficult to quantify the exact scope of such changes, this report still used 16,259 as the estimated total population who are eligible for receiving a health check.

The second figure is the number of checks performed. Because it is 2 years since the commencement of the NTER CHCs, many of the initial checks occurred some time ago and their clinical relevance has declined. Coverage is therefore estimated using the number of checks that have occurred within the last 15 months.

As at 30 June 2009, an estimated total of over 14,000 valid health checks have been performed through the NTER and Medicare Benefit Scheme (MBS) Item 708 health checks since the CHCI was commenced on 10 July 2007. CHC coverage peaked at 74% in November 2008 and counts checks conducted between 1 August 2007 and 30 November 2008. The estimated CHC coverage as at 30 June 2009 is 33% for last 15 months (from April 2008 to June 2009). This coverage figure

counts only one CHC per child. This figure does not include other types of wellness checks provided to children in the prescribed areas, such as the Healthy School Aged Kids (HSAK) checks and the Healthy Under 5 Kids Program (incorporating the former Growth Assessment and Action, or GAA program).

Data to monitor and evaluate the CHCI were collected only for children who received a check that was specifically funded through the NTER. There are no MBS data analysed in this report apart from those used to calculate the overall number of checks and coverage provided above.

## 1.2 Overview of the data collections

A summary of the key characteristics of the four data collections that are part of the NTER CHCI is provided in Table 1.1.

**Table 1.1: Overview of the AIHW CHCI data collections**

	<b>Child Health Check data collection</b>	<b>Chart Review data collection<sup>(a)</sup></b>	<b>Audiology data collection</b>	<b>Dental data collection</b>
<b>Relevant component of the NTER CHCI</b>	Child Health Checks	Initial and exit chart reviews	Audiology follow-up services	Dental follow-up services
<b>Who is eligible?</b>	Indigenous Australian children in prescribed areas of the NT aged 15 years or less	Children who had a CHC (with the exception of those children whose CHC was undertaken during the early follow-up phase of the NTER CHCI and identified no follow-up actions)	Children who had a CHC and other children in prescribed areas of the NT aged 15 years or less	Children who had a CHC and other children in prescribed areas of the NT aged 15 years or less
<b>Topics covered in the collection</b>	Broad range of topics including health conditions identified, and referrals made, during the CHCs	Whether child has been seen for conditions identified during the CHC and whether there are any outstanding conditions that require follow-up	Type and degree of hearing loss (if any), middle ear conditions (if any) and whether any further actions are required	Types of dental services provided, problems treated, number of deceased, missing and filled teeth, and whether any further actions are required
<b>How information is transferred to the AIHW</b>	Paper forms (majority) and electronically	Paper forms	Paper forms	Paper forms and electronically (majority)

Aboriginal and Torres Strait Islander children aged 15 years or less who live in the prescribed areas of the Northern Territory were eligible for a NTER CHC. These checks were undertaken from mid-July 2007 to 30 June 2009. After this time, the usual process of providing checks under the Medicare Benefits Scheme (MBS) without a separate data collection will continue. Because children can receive a CHC every 9 months, some children in the NT have had more than one CHC (this is discussed in detail in Chapter 2).

As part of the follow-up care, chart reviews are being conducted for those children who had a NTER CHC. These chart reviews capture information about follow-up care that has been received since the child had a CHC and any outstanding referral requiring follow-up. Audiology and dental follow-up services are also being provided as part of the CHCI. These services are available to all children who had a CHC, as well as to other Indigenous children living in the prescribed areas of the NT who are aged 15 years or less<sup>1</sup>. Although many children are given a referral to these services at a CHC, others are referred for these services through existing primary health care services or from some other point of referral within the NT health system.

Data for the four collections are transferred to the AIHW in different ways. For the CHC data collection, the majority of information has been transferred via paper forms. Nonetheless, the ability to transmit CHC data electronically is available. Information for the Chart Review data and Audiology data collections are provided to the AIHW via paper forms, while information for the Dental collection has been provided in either electronic or paper form.

## **1.3 Linkage of CHCI data with other data collections**

The four CHCI data collections maintained by the AIHW provide a valuable source of information on the extent of health checks and follow-up care provided to Indigenous children under the NTER. However, it is recognised that not all follow-up services provided to children who had a CHC are captured across the three CHCI follow-up collections. In order to identify these additional follow-up services, the AIHW conducted a round of data linkage with the NT DHF hospital service records in September 2009 as described in Chapter 6.

## **1.4 Data purpose, quality and limitations**

Interpretation of the data presented in this report should take into consideration the purpose of the data collections, the context in which the data were collected and the quality of the data.

### **1.4.1 Data purpose**

The four CHCI data collections were designed to track the implementation of the CHCs and follow-up care, and to evaluate the program. The aims for the evaluation have been agreed in consultation with the NT DHF, AMSANT and the AIHW. In summary, the evaluation aims to measure some components of the implementation of the NTER CHCI and, as far as

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<sup>1</sup> Because all children who had a CHC are eligible for the audiology and dental follow-up services, some of the children who received these follow-up services were aged 16 at the time of service provision. Thus the maximum age for the corresponding follow-up collections is 15 years for those who had not had a CHC and 16 years for those who were aged 15 years at the time of the CHC.

possible, its impact on and outcomes for the target population. More specifically, the evaluation aims to achieve the following objectives:

1. Assess the extent to which the CHCs reached the target population.
2. Identify the prevalence of health conditions among children living in the prescribed areas of the NTER who volunteered for a CHC.
3. Identify the extent to which requested primary care, allied health and specialist follow-up services have been received, gaps in existing health service delivery and barriers to the completion of follow-up treatment.
4. Explore the possibility of undertaking more complex evaluative analyses, which could include questions about:
  - a. whether or not the NTER CHC Initiative has led to improvements in health service delivery for Aboriginal and Torres Strait Islander children
  - b. the health status of children in relation to the social determinants of health and access to comprehensive primary health care
  - c. treatment outcomes.

The data presented in this progress report relate to the first three of these objectives. The fourth objective is expressed in exploratory terms because these tasks are more ambitious and are dependent on the quality of the data collected during the initial CHCs and the follow-up service delivery.

### **1.4.2 Data collection and quality**

As detailed more fully in previous progress reports, particularly the May 2008 report, the data that have been collected as part of the CHCI are a by-product of a clinical process. That is, those health professionals providing the CHCs and follow-up services documented the results of those checks and services on standard data collection forms, with the completed forms being forwarded to the AIHW. Thus the data shown in this report provide information about the health conditions identified, the referrals made and the follow-up services received for those children seen by health professionals as part of the NTER CHCI.

The extent of missing data should also be taken into account when using and interpreting data shown in this report. Where possible, the percentage of missing data is shown in the tables presented in this report.

### **1.4.3 Interpretation and data limitations**

There were several items included in the CHC that are not reported on here because of high levels of missing data and difficulties in assessing the validity of the data collected. These include mental health and sexual health issues in adolescents. This limits the scope of issues identified through the CHC.

The most crucial point to note is that the children who received CHCs and follow-up services are not a random sample of children living in the Northern Territory. They are a group of Indigenous children who live within the prescribed areas of the NTER CHCI whose families agreed to their participation in a CHC and/or to receive an audiology check or dental service. It must therefore be emphasised that the rates of health conditions presented in this report relate specifically to this subset of the population, and are not equivalent to the

prevalence rates of these conditions among all Indigenous children in the NT, or all children in the prescribed areas of the NTER. At this stage, broader prevalence rates cannot be calculated from the CHCI data because nothing is known about the characteristics of children in prescribed areas compared with those not in prescribed areas, or the differences between children whose families volunteered for a CHC and those who did not.

The second point is that, by nature of the collection process, there is an unavoidable lag between date of service provision and date of data receipt. Therefore, there will be a number of services that have been provided to children by this date that have not yet been recorded and received by the AIHW. These services cannot be included in the analyses.

Thirdly, as mentioned above, not all children who have received a service can be captured in the follow-up databases because of the nature of the collections. The Audiology and Dental data collections capture information on children who have had a check done by a member of a specific audiology or dental team, but services conducted by other providers are not captured.

Many children are also missing from the follow-up data provided in this report owing to lack of clarity in the consent-obtaining protocols. If children or their families have not given consent for their information to be used in unit record form, they cannot be presented by demographic characteristics or referral type, but only in aggregated form. This may limit the usefulness of the information.

The Dental collection, in particular, is more limited than the other collections because of practical difficulties in obtaining the appropriate consent for the transmission of de-identified client-level records to the AIHW. The dental data also lack a measure of oral health status (the number of decayed, missing or filled teeth). These problems are currently being rectified, with more complete data expected to be available in the future.

Because of the data limitations mentioned above, this report is likely to understate the extent of health checks and services provided to children at any particular time.

Finally, the data in each CHCI collection are derived from different data collection processes and, although the same data items may be available from several sources (i.e. the Chart Review collection has data items that can cross reference some data from the Dental, Audiology and NT DHF data collections), none of the collections are sufficiently complete for these data to be reconciled at this point in time. For this reason, the focus of analysis in this report is on the general trends and patterns of service delivery. The December 2008 report noted the preliminary nature of the analysis presented there and caution is urged in making comparisons between that report and the current report.

The limitations that apply to each data collection are discussed in more detail in subsequent chapters, as well as in Appendix 2.

#### **1.4.4 Comparisons with other data sources**

There are several other data sources that cover similar topics to the CHCI collections. These data sources often differ from the CHC data collection in many critical aspects, such as methodology, study population, time period, age groups, geographic areas, and the definitions and classification of diseases. A comparison between the results of CHC data and other studies are helpful for validating the health problems identified through the CHCI. A list of these studies can be found in Appendix 6.

## 1.5 Report overview and structure

This report presents updated information on children who had CHCs and the extent of follow-up audiology and dental care they received up until 30 June 2009. In addition, information provided to the AIHW by the NT DHF on children who had received other health services following their CHC is also presented. The report provides information to answer key questions such as:

- What proportion of children in NTER prescribed areas who were eligible to receive CHCs actually received these checks?
- What health conditions were identified among Indigenous children who were seen at CHCs?
- What health services are needed for Indigenous children in NTER prescribed areas as identified by referrals received at CHCs?
- To what extent have Indigenous children who had a CHC received the follow-up services they need?
- What is the extent and type of unmet or continuing need for services among Indigenous children in the prescribed areas?

The current report follows a structure similar to that of the second progress report. The information presented in the remainder of this report has been divided into the following chapters:

- Chapter 2 presents the key findings from the CHC collection, including details on the health conditions recorded and any changes over time. The chapter also examines health management activities conducted during the CHCs, including referrals made to follow-up services.
- Chapter 3 presents information on follow-up services based on the information from the Chart Review data collection.
- Chapter 4 presents information about the Audiology data collection, including results on the type and degree of hearing loss, types of middle ear conditions and whether any further action was required. Changes in hearing loss status and requirements for follow-up services across time are also presented, together with results from a data set that linked the Audiology and CHC data collections.
- Chapter 5 presents key findings from the Dental data collection, including details on the services provided and the problems treated.
- Chapter 6 presents information on follow-up services provided by hospital services.

At the end of each chapter, a discussion brings out the main points, along with some policy implications. The report also includes the following appendixes:

- Appendix 1: a map of the regions covered by the NTER CHCI;
- Appendix 2: data quality issues that may affect the interpretation of information presented from each data collection ;
- Appendix 3: region-specific results on health conditions;
- Appendix 4: region-specific referrals from the CHC data collection;
- Appendix 5: how to select records and count referrals of children in CHC and Chart Review databases for analysis of follow-up care for children;
- Appendix 6: a description of other similar studies;

- Appendix 7: Classification on the management of health condition in the CHC;
- Appendix 8: The latest versions of the data collection forms.