

# Northern Territory Aboriginal Health

*Key Performance Indicator Information System*



Australian Government  
Department of Health



Northern  
Territory  
Government

## NT AHKPI Prompt Sheet

For the Health Centre Community Report

**Version 1.0.5**

June 2021

## Document Approval

The NT AHKPI Clinical Reference Group has delivered this Prompt Sheet in order to assist community health services staff in applying Continuous Quality Improvement to their NT AHKPI Initial Release Report(s).

This document version is the approved reference for this system from the date indicated.

The document is a managed document. For identification of amendments, each page contains a release number and a page number. Changes will only be issued as complete replacement. Recipients should remove superseded versions from circulation.

This document has been reviewed by the NT AHKPI Clinical Reference Group and "Approved by" indicates endorsement for release. Prior to release all system changes have been reviewed and tested.

Action	Name	Position	Date
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### Associated Documents

Doc	Name	File Name
1	NT Aboriginal Health Key Performance Indicators Definitions	KPIDefinitionV2_7.pdf
2	NORTHERN TERRITORY ABORIGINAL HEALTH KEY PERFORMANCE INDICATORS (NT AHKPIs), DATA MANAGEMENT POLICY and Data Receiving Protocol	Data Management Policy 2.7.pdf Data Receiving Protocol_v2.7.pdf

### Document Control

#### Release Details

Ver.	Date	Reason for Change	Document/ Para Ref	Made By	Description of Change
1.0.5	25/06/2021	Update of KPI Definition 1.4.2  Inclusion of Additional KPI 1.4.3  Update of KPI Definition 1.10		Peta	KPI 1.4.2 Immunisation timeliness measurement changed to 4 months and 12 months age group and received within 30 days of when they are due.  Reporting of new KPI 1.4.3 Immunisation timeliness measurement for 18 months and 4 years age group and received within 3 months of when they are due.  Numerator(s):  1. Chronic Disease Management Plan (MBS Item 721 or equivalent MBS item numbers for a

		Update of KPI definition 1.7			<p>General Practitioner Management Plan - 2 year reporting period)</p> <ol style="list-style-type: none"> <li>2. Chronic Disease Management Plan (MBS Item 721 <b>or equivalent MBS item numbers</b> for a General Practitioner Management Plan - 1 year reporting period)</li> <li>3. Chronic Disease Management Plan (MBS Item 723 <b>or equivalent MBS item numbers</b> for Team Care Arrangements – 2 year reporting period)</li> <li>4. Chronic Disease Management Plan (MBS Item 723 <b>or equivalent MBS item numbers</b> for Team Care Arrangements – 1 year reporting period)</li> </ol> <p>Denominator (for MBS Item 721, 723 <b>or equivalent MBS item numbers</b> for a GPMP and TCA and Alternative GPMP &amp; TCA Care Plans)</p> <p>Currently the indicator specifies only MBS items 721 and 723.</p> <p>The additional MBS items required to be added are: <b>229, 92024, 92068, 92055, 92099 230, 92025, 92069, 92056, 92100</b></p> <p>The definition now states: MBS item 721 - General Practitioner Management Plan (GPMP), (Medicare Benefit Schedule) (Item 721 and 723) (Medicare Australia 2007), <b>or equivalent MBS item numbers</b> for a GPMP.</p> <p>Numerator(s):</p> <ol style="list-style-type: none"> <li>1. Chronic Disease Management Plan (MBS Item 721 <b>or equivalent MBS item numbers</b> for a General Practitioner Management Plan - 2 year reporting period)</li> <li>2. Chronic Disease Management Plan (MBS Item 721 <b>or equivalent MBS item numbers</b> for a General Practitioner Management Plan - 1 year reporting period)</li> <li>3. Chronic Disease Management Plan (MBS Item 723 <b>or equivalent MBS item numbers</b> for Team Care Arrangements – 2 year reporting period)</li> <li>4. Chronic Disease Management Plan (MBS Item 723 <b>or equivalent MBS item numbers</b> for Team Care Arrangements – 1 year reporting period)</li> </ol>
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		Update of KPI Definition 1.12  Update of KPI Definition 1.2.2			<p>Denominator (for MBS Item 721, 723 <b>or equivalent MBS item numbers</b> for a GPMP and TCA and Alternative GPMP &amp; TCA Care Plans)</p> <p>Currently the indicator specifies only MBS items 721 and 723. The additional MBS items required to be added are:</p> <p><b>229, 92024, 92068, 92055, 92099</b></p> <p><b>230, 92025, 92069, 92056, 92100</b></p> <p>The definition now states:</p> <p>MBS item 721 - General Practitioner Management Plan (GPMP), (Medicare Benefit Schedule) (Item 721 and 723) (Medicare Australia 2007), <b>or equivalent MBS item numbers</b> for a GPMP.</p> <p><b>KPI 1.12 Cervical Tests Removal of 2 and 3 years</b> reporting, and <b>addition of 4 years</b> reporting.</p> <p><b>KPI 1.2.2 Anaemia in pregnancy updated</b> measurement calculation changes for haemoglobin i.e. <b>(Hb &lt;110g/L at &lt;20 wks gestation or Hb&lt;105g/L at &gt;=20 wks gestation)</b></p>
1.0.4	05/12/2019	Renumbering KPI 1.2 Inclusion of Additional KPI 1.2.2		Seetha	KPI 1.2 First Antenatal Visit: Renumbered to KPI 1.2.1 Reporting of KPI 1.2.2 Anaemia in Pregnancy
1.0.3	10/05/2019	Updated the changes to KPI 1.7,1.8.1,1.10 and 1.11		Seetha	KPI 1.7 Include resident clients aged 5 to 14 years. KPI 1.8.1 Include resident clients aged 5 to 14 years.  KPI 1.10 Include resident clients aged 0 to 14 years.  KPI 1.11 Merge into KPI 1.10
1.0.2	20/01/2017	Include all current KPI's	ALL	J Singh	Transferred prompts from extended prompt feedback template prepared by Kerry Copley for NTAHKPI community reports.
1.0.1	17/01/11	Include more prompt information	ALL	S Noor	Transferred Key Comments prompts from Community Report to this document.
1.0.0	15/7/10	First Release	ALL	M Roberts	First Release of prompt sheet for July 2010 NT AHKPI Financial Year Release

## Background

This prompt sheet has been developed to assist community clinics/health services and Health Service Delivery Area staff in assessing their Initial Release draft report(s) for completeness and accuracy and to add comment or explanations to each of the NT AHKPIs. There may be some significant clinical and environmental factors which you are aware of which may have contributed to your KPI outcome data.

This prompt sheet can also be used for clinical teams to analyse their final report and consider continuous quality improvement activities to improve. There may be some simple systematic changes that could be made within your clinic or community environment which could then improve access or providing health care, to work toward improving Aboriginal health outcomes.

Your Continuous Quality Improvement Facilitator for your HSDA can assist you in analysing your reports and facilitating continuous quality improvement activities with your team.

You may also consider running other reports in your PIRS to further analyse your data to pin point issues or factors which may be contributing to your KPI outcomes.

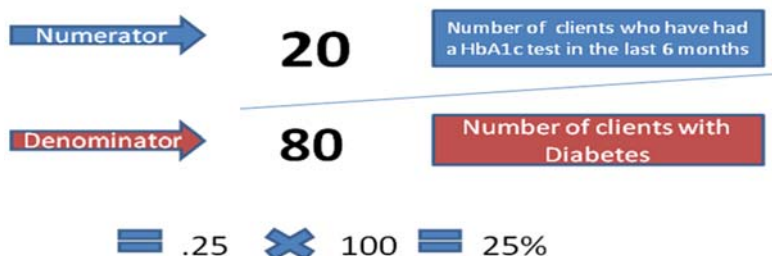
When analysing your data at the initial release stage or for continuous quality improvement purposes, consider referring to the NT AHKPI Definition document and '(KPI Specific) Known Data Quality Issues' in your Initial Release draft report. The definition and Known Data Quality comments against each of the KPIs will provide further guidance to understand the KPI rationale, counting rules and information to consider when analysing your KPI outcome data.

### General Prompt Notes

- Do you understand the NT AHKPI query and how the data is being extracted from your PIRS?
- In some services, staff reporting on the NT AHKPIs may have better technical knowledge than practitioners, and should be able to explain to staff what clinical data is being extracted and how proportions and percentages are calculated (e.g. proportion of children who are anaemic). It is important to understand the numerators and denominators which calculate the percentages and the denominator is highlighted against each KPI below.

**Note: COMPARISON TO THE "NT DATA" ARE MEANINGLESS AT THIS POINT AS THE "NT DATA" ARE ONLY FOR WHAT DATA ARE DELIVERED SO FAR.**

Think about a simple equation to get a percentage



- In larger clinics/services it is important that data analysis is done with managers and practitioners working within NT AHKPI focused areas such as maternal and child health, chronic disease and preventative health. It is important to contextualise the information so that it can tell a story.
- If you get an unexpected result consider whether the data is accurate, or have there been significant clinical factors or community and environmental factors which may have contributed to the KPI outcome. Reasons why it may not be accurate include :
  - Are patients being coded accurately as current, transient and past. Misclassifying visitors as current patients will reduce your performance as you will not necessarily have provided comprehensive health care during the period for these visitors e.g. two HbA1c, or children's immunization record may not be complete.
  - Has there been a change of staff? Has staff had appropriate training in PIRS?
  - Is data being coded in the right place? e.g. are qualifiers (appropriate fields for numeric and text data to be coded) being used for coding appropriately rather than adding values within the progress notes.
- Do you have a good system to ensure patient status is maintained? (For Communicare users if you have a system to manually change the patient status then it is recommended you disable the 'inactivity years' found in the system parameters patient tab.

- Change in PIRS usage ;shift from paper based to electronic PIRS could significantly affect data quality
- If you think that this is a real change rather than reflecting inaccurate data, consider reasons for this change
  - e.g. staffing and program changes, workload in acute care affecting time spent on recall/reminder and check-ups.
- Key comments in the report might give further prompts on data presentation and interpretation.

### Small numbers

#### Interpreting small numbers

It is important that you do not over interpret small numbers particularly in indicators such as low birth weights, underweight children and anaemia. Numbers can vary due to random fluctuation and this is especially likely when the numbers are small. For instance if you have 2 anaemic children in one reporting period and then four in the next period, this does not necessarily mean that there is a clinical or public health reason for this change even though the numbers have doubled : it could just be due to chance. However, if you had twenty underweight children in one reporting period and forty in the next, there would be more cause for concern as with these bigger numbers, it is more likely that there is an underlying reason for the change e.g. less effective follow up of children who are anaemic.

#### Identifying individuals

When you show this data to the community or board, be aware that presenting small numbers may risk identifying individuals even though this data is meant to be “ de-identified ( i.e. it doesn’t refer to individuals and cannot be traced back to individuals). For instance if you present that you only had 2 underweight babies in the last reporting period, community members may try to work out who these babies are. This may affect the privacy of these families.

### NT AHKPI Prompts against each KPI

#### AHKPI 1.1 : Episodes of Health Care and Client Contacts

**Definition** - Number of episodes of care and client contact during reporting period, disaggregated by sex, age group, Indigenous status, residential status and locality.

Episode of care: contact between an individual client and a service by one or more staff to provide health care.

Client contact: The numbers of health professionals who have contact with a client during an episode of health care.

**Rationale** - Measures the uptake of the service as well as equity in access to health services between health centres within a Health Service Delivery Area.

**Relevance** - The indicator provides a way of monitoring workload for a community health centre and is useful data for planning and resource allocation.

Reporting under the various groupings allows an assessment of the demographic presentations and comparisons with community/service populations

#### **DATA QUALITY**

##### **Numerator**

- The number of episodes of health care during reporting period.
- The number of client contacts during reporting period.

##### **Denominator**

- The resident population count as at the end of the reporting period.

#### **MAKING SENSE/UNPACKING THE DATA**

- Understand the KPI – what is this KPI asking us?
- What is your target/benchmark?

If the number of episodes of care and client contacts are different to what is expected, consider the following:

- Could this just be fluctuation due to chance? i.e. it is not a trend
- Is this change what you expected due to data cleansing or quality improvement activities?
- Have practitioner positions increased or were vacant during this period?
- Have community numbers increased or decreased due to cultural reasons? E.g., a bereavement/unusual weather or epidemic?
- Gender mix – is it normal or has there been a change in gender ratios?
- The proportion of people seen in different age groups

Note: Possible reasons for changes in age group or gender breakdown could include male health programs, gender focused activities, e.g., child/adult health checks or youth outreach programs

### **AHKPI 1.2.1 : First Antenatal Visit**

**Definition** - The number and proportion of regular clients who are residents, who gave birth to Indigenous babies during reporting period and who attended first antenatal visit (at any health service locality) before 13 weeks gestation, disaggregated by age group, Indigenous status and locality.

**And**

The number and proportion of regular clients who are residents, who gave birth to Indigenous babies during reporting period and who attended first antenatal visit (at any health service locality) after 13 weeks (including 13 week) and before 20 weeks gestation, disaggregated by age group, Indigenous status and locality.

Indigenous baby:

Indigenous baby is a baby with at least one parent who identifies as Indigenous (born to mothers who are either Indigenous or non-Indigenous)

First antenatal visit:

The guidelines of a “first antenatal visit” are below:

Blood Pressure test

Order mid-stream urine for microscopy, culture and sensitivities.

Order blood group and antibody test

**Rationale** - The aim of antenatal care is to maximise the health outcomes of the mother and the baby. It aims to identify and manage risk factors or complications early, and to monitor progress with information and support during pregnancy.

**Relevance** - This is a good indicator of accessibility and appropriateness of antenatal care.

Early presentation promotes better antenatal outcomes.

Reflects a number of access issues.

**DATA QUALITY**

**Numerator:** The number of resident women aged:

- a. less than 20
  - b. 20-34 years
  - c. 35 years and over
- and** who attended first antenatal visit:
- a. before 13 weeks gestation
  - b. at 13 weeks or after, but before 20 weeks
  - c. at or after 20 weeks of pregnancy
  - d. did not attend an antenatal visit
  - e. not recorded whether attended an antenatal visit
- and** who are:
- f. Indigenous
  - g. non-Indigenous
- and** who gave birth to Indigenous babies during the reporting period

**Denominator:** The number of resident women aged:

- less than 20
- 20-34 years
- 35 years and over

**And** who gave birth to an Indigenous baby during the reporting period.

**MAKING SENSE/ UNPACKING THE DATA**

- Staffing mix - presence of a midwife
- Are there more clients than expected?
- Have visitors been counted?
- Has the number of 'did not attend/not been recorded' increased or decreased? Is there a reason for this?
- Has end of pregnancy date been recorded?
- Have all pregnancies been recorded correctly and in order?

Is the gestation for all checks correct?

**AHKPI 1.2.2 : Anaemia in Pregnancy**

**Definition** - The number and proportion of regular clients who are residents, who gave birth to Indigenous babies during the reporting period and whose haemoglobin is less than 110g/L up to 20 weeks of pregnancy, or less than 105g/L from 20 weeks of pregnancy. (Australian Health Ministers; Advisory Council 2014, Clinical Practice Guidelines: Antenatal care – Module II)

Indigenous baby:

Indigenous baby is a baby with at least one parent who identifies as Indigenous (born to mothers who are either Indigenous or non-Indigenous)

**Rationale** - Haemoglobin levels are an indicator of the oxygen carrying capacity of the blood and are one indicator of nutritional status. Haemoglobin is included in a full blood examination (FBE) which is part of routine antenatal blood tests taken at first antenatal visit, 28 weeks and 36 weeks of the pregnancy. Point of care testing is not recommended during pregnancy..

**Relevance** - The measurement of haemoglobin is an indicator of iron (micronutrient) status of pregnant women, which may have an impact on their children including a potential link to child anaemia. It reflects service performance as screening and management of anaemia is a core part of antenatal care.

**DATA QUALITY**

**Numerator:**

- a. The number of resident clients who gave birth to Indigenous babies during the reporting period and who were measured for anaemia during pregnancy.



- b. The number of resident clients who gave birth to Indigenous babies during the reporting period whose haemoglobin was considered anaemic at their last test during the pregnancy (Hb <110g/L at <20 wks gestation or Hb<105g/L at >=20 wks gestation)
- c. The number of resident clients who gave birth to Indigenous babies during the reporting period whose haemoglobin was considered anaemic at any test during the pregnancy (Hb <110g/L at <20 wks gestation or Hb<105g/L at >=20 wks gestation)

**Denominator:**

- a. The number of resident clients who gave birth to Indigenous babies during the reporting period
- b. The number of resident clients who gave birth to Indigenous babies during the reporting period and who have been measured for anaemia during pregnancy

**Level/unit of counting:**

Disaggregated by:

- a. Locality
- b. Age
  - i. Less than 20 years
  - ii. 20-34 years
  - iii. 35 years and over

**Counting rules:**

Each client to be counted once against each numerator.

Pregnancy start date is calculated by difference between gestation at birth and birth date.

**Include:**

- c. Live births
- d. Stillbirths greater than 400 grams with a gestation age greater than 20 weeks

**Exclude:**

- e. First trimester miscarriages
- f. Terminations.
- g. Unknown gestation

**MAKING SENSE/ UNPACKING THE DATA**

- Are there midwives on staff to deliver a/n care, Ferinject transfusions etc ?
- Is A/N care delivered by any other agency apart from the PHC team as this could impact the data if it is not captured in the KPIs? Eg Midwifery Group Practice
- Are visitors to the community being counted in this KPI but are receiving A/N care elsewhere?
- Have DNAs for follow up treatment increased or decreased?

### **NT AHKPI 1.3 : Birth Weight**

**Definition** - The number and proportion of low, normal and high birth weight Indigenous babies who were live born during the reporting period and who were born to resident mothers, which are disaggregated by birth weight group, mother's Indigenous status, mother's age group and mother's locality.

Indigenous baby:

Indigenous baby is a baby with at least one parent who identifies as Indigenous (born to mothers who are both Indigenous or non-Indigenous)

Birth weight:

Birth weight is the first weight of the baby obtained after birth (National Health Data Dictionary).

Low, normal and high birth weights are less than 2,500 grams (World Health Organisation), between 2500 to 4499 grams, and 4500 grams and over respectively.

**Rationale** - The birth weight of an infant is a principle determinant of their chances of survival and good health. Low birth weight is a risk factor for neurological and physical anomalies, the risk of adverse outcomes increasing with decreasing birth weight. Low birth weight may be an indicator of inadequate foetal growth, resulting from pre-term birth or foetal growth restriction or both. Low birth weight is one of the major determinants of perinatal mortality. Infants weighing less than 2,500 grams are almost 40 times more likely to die within the first 28 days than of infants of normal birth weight.' (*Reproductive Health Indicators Australia 2002*).

The Northern Territory has the highest incidence of low birth weight in Australia. Mothers less than 20 years old had the highest occurrence and the incidence of low birth weight babies amongst Indigenous mothers, almost twice the rate of non-Indigenous mothers. (*NT Mothers and Babies 2000-2002*)

**Relevance** - This indicator is extremely relevant to program areas. Program areas need to target those regions or populations where there is evidence that those areas have a high incidence of babies born with low or high birth weights.

There is evidence to suggest that low birth weight is associated with maternal age, primiparity, history of one or more spontaneous abortions, induced abortions or perinatal deaths, chronic illness, substance abuse, domestic violence, maternal illness, unemployment, overcrowded living conditions, poor education, and social dysfunction and social disadvantage. Low birth weight is related to a large range of complex factors of which a whole of government approach is necessary.

It is an appropriate and widely accepted indicator of perinatal health.

- Critical health indicator for health system.
- Strongly related to infant mortality.
- Broad indicator to assess improvement.

#### **DATA QUALITY**

##### **Numerator:**

d. The number of low birth weight Indigenous babies who were live born during the reporting period **and** who were born to resident mothers

The number of normal birth weight Indigenous babies who were live born during the reporting period **and** who were born to resident mothers

The number of high birth weight Indigenous babies who were live born during the reporting period **and** who were born to resident mothers

##### **Denominator:**

The number of Indigenous babies who were live born during the reporting period

**and** who were born to resident mothers aged:

e. less than 20

20-34 years

35 years and over

**and** who are:

h. Indigenous.

i. Non-Indigenous.

#### **MAKING SENSE/ UNPACKING THE DATA**

- Birth Weights
- Prematurity
- Multiple births
- Growth Restriction/ Intrauterine Growth Retardation
- Maternal Diabetes
- Has end of pregnancy date been recorded?
- Have all pregnancies been recorded correctly and in correct order?
- Is the gestation for all checks correct?

Note: Have a full list of births for the previous 12 months.

## NT AHKPI 1.4.1 : Fully Immunised Children

**Definition** - Proportion of resident Indigenous children who are:

6 months to less than 1 year

1 year to less than 2 years

2 years to less than 6 years.

**and** who have received all age appropriate immunisations as per the NT immunisation schedule.

**Rationale** - Immunisation is a highly cost effective intervention in reducing morbidity and mortality rates in vaccine preventable diseases. Health system effectiveness in providing vaccination services can be measured by vaccination coverage at key milestones (12 and 24 months of age).

(Source: National Health Performance Committee (NHPC) (2002), National Report on Health Sector Performance Indicators 2001, Queensland Health, Brisbane.)

**Relevance** - Reduces vaccine preventable diseases

Reflects health service systems

### **DATA QUALITY**

#### **Numerator:**

a. The number of resident children aged 6 months to less than 1 year.

The number of resident children aged 1 year to less than 2 years.

The number of resident children aged 2 years to less than 6 years

**And** who have received all age appropriate immunisations as per the NT immunisation schedule as at the end of the reporting period.

#### **Denominator:**

b. The number of resident children aged 6 months to less than 1 year.

The number of resident children aged 1 year to < 2 years.

The number of resident children aged 2 years to < 6 years

As at the end of the reporting period.

### **MAKING SENSE/ UNPACKING THE DATA**

- Please refer to the changes in the Vaccination/Immunisation schedules
- Recording of immunisations performed elsewhere will increase accuracy for this KPI.

Consider factors that may have affected performance e.g.,

- Staff shortage or staff changes
- External factors e.g., fridge failure
- Changing demands for acute care affecting program delivery.
- Conscientious objectors and refusals

Note: a leeway of 6mths is given to allow for a child to be immunized at a given age. Therefore even if your data is good, you could still have large proportion of young children who are significantly late for immunisation.

## **NT AHKPI 1.4.2 : Timeliness of Immunisations due at 4 and 12 months**

**Definition** - Proportion of children who have received immunisations due at 4 months and 12 months within 30 days of when they were due.

**Rationale** - This indicator will assess immunisation timeliness in children due immunisations at 4 months and 12 months using a more stringent definition of fully immunised than the existing NTAHF immunisation indicator. This indicator will thus provide additional information which will assist with improving immunisation timeliness in younger children who are at high risk of adverse outcomes from vaccine preventable diseases.

**Relevance** – This indicator is relevant to reducing rates of vaccine preventable disease in younger children who are at high risk of adverse outcomes.

### **DATA QUALITY**

#### **Numerator:**

- a. The number of resident children who received their scheduled immunisation due at 4 months of age according to the NT Immunisation schedule **and** they received them within 30 days of when they were due.
- b. The number of resident children who received their scheduled immunisation due at 12 months of age according to the NT Immunisation schedule **and** they received them within 30 days of when they were due.

#### **Denominator:**

- a. The number of resident children aged 4 months of age who were due a scheduled immunisation and the scheduled immunisation + 30 days falls within the reporting period
- b. The number of resident children aged 12 months of age who were due a scheduled immunisation and the scheduled immunisation + 30 days falls within the reporting period

#### **Level/unit of counting:**

Disaggregate by:

1. Locality
2. Indigenous status
3. Age group:

#### **Counting rules:**

Immunisation to be counted by individual antigen where possible, or by immunisation recall service date where not possible  
Child's residential statuses are determined according to the end of reporting period  
Child's ages are calculated according to the end of reporting period.

Include children who are aged between 5 months to less than 17 months at the end of the reporting period, and children who are aged 13 months to less than 25 months at end of reporting period

### **MAKING SENSE/ UNPACKING THE DATA**

See previous prompts

Note: When analysing your data in this initial draft release, consider below:

Please refer to changes in the Vaccination/Immunisation schedules

## **NT AHKPI 1.4.2 : Timeliness of Immunisations due at 18 months and 4 years**

**Definition** - Proportion of children who have received immunisations due at 18 months and 4 years within 3 months of when they were due.

**Rationale** - This indicator will assess immunisation timeliness in children aged 18 months and 4 years using a more stringent definition of fully immunised than the existing NTAHF immunisation indicator. This indicator will thus provide additional information which will assist with improving immunisation timeliness in children who are at high risk of adverse outcomes from vaccine preventable diseases.

**Relevance** – This indicator is relevant to reducing rates of vaccine preventable disease in children who are at high risk of adverse outcomes.

### **DATA QUALITY**

#### **Numerator:**

- a. The number of resident children who received their scheduled immunisation due at 18 months of age according to the NT Immunisation schedule **and** they received them within 3 months of when they were due.
- b. The number of resident children who received their scheduled immunisation due at 4 years of age according to the NT Immunisation schedule **and** they received them within 3 months of when they were due.

**Denominator:**

- a. The number of resident children aged 18 months of age who were due a scheduled immunisation and the scheduled immunisation + 3 months falls within the reporting period
- b. The number of resident children aged 4 years of age who were due a scheduled immunisation and the scheduled immunisation + 3 months falls within the reporting period

**MAKING SENSE/ UNPACKING THE DATA**

Immunisation to be counted by individual antigen where possible, or by immunisation recall service date where not possible  
Child's residential statuses are determined according to the end of reporting period  
Child's ages are calculated according to the end of reporting period.

Include children who are aged between 21 months to less than 33 months at the end of the reporting period, and children who are aged 4 years and 3 months to less than 5 years and 3 months at end of reporting period

Note: When analysing your data in this initial draft release, consider below:

Please refer to changes in the Vaccination/Immunisation schedules

## NT AHKPI 1.5 : Underweight Children

**Definition** - The number and proportion of children less than 5 years of age who are residents and who are less than -2 standard deviations away from the mean weight for age

Z scores: Standard deviations (Z scores) are derived from methodologies defined by the World Health Organisation Child Growth Standards 2006. (<http://www.who.int/childgrowth/standards/en>)

**Rationale** - Weight for age is a sensitive measure of growth in children. The calculation does not require height so coverage is generally better than weight for height.

### **Relevance**

This KPI reflects the last recorded weight only

### **DATA QUALITY**

#### **Numerator:**

- j. The number of resident children who are less than 5 years of age at the date for weight measurement **and** who are more than -2 standard deviations away from the mean weight for age during the reporting period.
- k. The number of resident children less than 5 years of age at the date for weight measurement **and** who were measured for weight at least once during the reporting period.

#### **Denominator:**

- b. The number of resident children who were less than five years of age at the beginning of the reporting period or were born during the reporting period **and** who were measured for weight at least once during the reporting period.
- c. The number of resident children who are less than five years of age at the beginning of the reporting period or were born during the reporting period.

*(Child's ages are calculated to the end of reporting period to include those who are less than six years of age. (e.g. include all children who were less than five years of age at the beginning of the reporting period or were born during the reporting period).*

### **MAKING SENSE/ UNPACKING THE DATA**

- Were there focused child health check activities
- Were there a high number of new born babies (premature or underweight)
- Is staffs trained to interpret the percentile charts?
- Are children routinely weighed
- Were there any epidemics/viral outbreaks
- Availability of calibrated equipment
- Have the weights been influenced by community business

Note: Child's ages are calculated to the end of reporting period to include those who are less than six years of age. (E.g. include all children who were less than five years of age at the beginning of the reporting period or were born during the reporting period).

## NT AHKPI 1.6 : Anaemic Children

**Definition** - The number and proportion of children who are residents, who are:

>= 6 months and < 12 months of age and whose haemoglobin level is less than 105 g/L

or

>= 12 months and < 5 years of age and whose haemoglobin level is less than 110 g/L

(Central Australian Rural Practitioners Association 2009. *CARPA Standard Treatment Manual*, 6<sup>th</sup> Edition, Central Australian Rural Practitioners Association, Alice Springs).

**Rationale** - Haemoglobin levels are an indicator of the oxygen carrying capacity of the blood and are one indicator of nutritional status. Haemoglobin can be measured easily in the primary health care setting and results can be obtained instantly using a haemoglobin meter.

**Relevance** – The measurement of haemoglobin is an indicator of iron (micronutrient) status of children. Significant health status indicator. Reflects service performance.

### **DATA QUALITY**

#### **Numerator:**

1. The number of resident children, who are:

a. Greater than or equal to 6 months and less than 12 months of age at the date for anaemia measurement **and** whose haemoglobin level is less than 105 g/L during the reporting period.

or

b. Greater than 12 months and less than 5 years of age at the date for anaemia measurement **and** whose haemoglobin level is less than 110 g/L during the reporting period.

2. The number of children who are residents **and** who are >= 6 months and < 5 years of age **and** who have been measured for anaemia during the reporting period.

*(Child's ages are calculated according to the date for anaemia measurement).*

#### **Denominator:**

1. The number of resident children who are greater than or equal to 6 months and less than 5 years of age at the beginning of the reporting period or were born during the first six months of the reporting period **and** who have been measured for anaemia during the reporting period.

2. The number of resident children who are greater than or equal to 6 months and less than 5 years of age at the beginning of the reporting period or were born during the first six months of the reporting period.

*(Child's ages are calculated to the end of reporting period to include those who are less than six years of age. (e.g. include all children who were less than five years of age at the beginning of the reporting period or were born during the first 6 months of the reporting period)).*

### **MAKING SENSE/ UNPACKING THE DATA**

- Were there focused child health check activities?
- Are staff trained to use protocols?
- Are staff trained to use testing equipment - Pronto, Rad 67 and Hemocue?
- Does the child have a chronic illness or an underlying infection?
- Was the mother anaemic during the pregnancy?
- Are CARPA guidelines being followed?
- Availability of calibrated equipment
- Are there Quality Control issues?
- Has the haemoglobin been influenced by community business?

## NT AHKPI 1.7 : Chronic Disease Management Plan

### Definition -

Definition: The number and proportion of resident Indigenous clients, who are 5 years old and over, who have been diagnosed with Type II diabetes and/or Coronary Heart disease and who have a valid Chronic Disease Management Plan at the end of reporting period.

Coronary Heart Disease (also referred to as Ischemic Heart Disease):

Based on NPCC Guidelines Coronary Heart Disease includes:

1. Myocardial infarction
2. Angina
3. Unstable angina pectoris
4. Revascularisation as evidenced by angioplasty with or without a stent
5. Coronary artery bypass surgery

CHD's primary feature is insufficient blood supply to the heart itself. The two major clinical forms are heart attack (the insufficient blood supply is sudden and extreme) and angina.

Type II diabetes:

Type II diabetes includes the common major form of diabetes, which results from defect(s) in insulin secretion, almost always with a major contribution from insulin resistance. Type II diabetes does not include: Type I diabetes, Gestational diabetes mellitus, Secondary diabetes, Impaired fasting glycemia or Impaired glucose tolerance.

Chronic Disease Management Plan:

Chronic Disease Management Plans for the purpose of this indicator are defined as:

1. MBS item 721 - General Practitioner Management Plan (GPMP), (Medicare Benefit Schedule) (Item 721 and 723) (Medicare Australia 2007).

or

2. Alternative Chronic Disease Management Plan in the form of General Practitioner (or equivalent) Management Plan that cannot be claimed that includes the following items in clinical guidelines and protocols for developing an alternative GPMP.

The following mandatory items are included in the alternative General Practitioner Management Plan:

- a. Assessing the patient to identify and/or confirm the entire patient's health care needs, problems and relevant conditions
- b. Agreeing management goals with the patient for the changes to be achieved by the treatment and services identified in the plan
- c. Identifying any actions to be taken by the patient
- d. Identifying treatment and services that the patient is likely to need and making arrangements for provision of these services and ongoing management
- e. Documenting the patient's needs, goals, patient actions, treatment/services and a review date i.e. completing the GPMP document.

or

3. MBS Item 723 - Chronic Disease Management Plan Team Care Arrangements (TCA), (Medicare Benefit Schedule) (Item 721 and 723) (Medicare Australia 2007).

or

4. Alternative Chronic Disease Management Plan in the form of TCA's that includes the following items in clinical guidelines and protocols for developing an alternative TCA.

The following mandatory items are included in the alternative Team Care Arrangement:

- a. Discussing with the patient which treatment/service providers should be asked to collaborate with the GP in completing TCA;
- b. Gaining the patient's agreement to share relevant information about their medical history, diagnoses, GPMP etc (with or without restrictions) with the proposed providers;
- c. Contacting the proposed providers and obtaining their agreement to participate, realising that they may wish to see the patient before they provide input but that they may decide to proceed after considering relevant documentation, including any current GPMP;
- d. Collaborating with the participating providers to discuss potential treatment/services they will provide to achieve management goals for the patient;
- e. Documenting the goals, the collaborating providers, the treatment/services they have agreed to provide, any actions to be taken by the patient and a review date i.e. completing the TCA document; and
- f. Providing the relevant parts of the TCA to the collaborating providers and to any other persons who, under the TCA, will give the patient the treatment/services mentioned in the TCA.

**Rationale** - Preventable chronic diseases are responsible for a significant burden of disease for Aboriginal people and if poorly controlled increase hospitalisations, complications and the cost of health care. Care plans are the foundation for providing appropriate long-term care and an increase in the proportion will demonstrate improved health service delivery



**Relevance** – Prevention of chronic diseases requires planned chronic disease programs. This indicator reflects the quality of management of preventable chronic diseases and reflects a successful team approach at a Community Health Centre. Measures activity levels. N.B. NOT a measure of “Total care provided”.

**DATA QUALITY**

**Numerator(s):**

Numerator(2);

**Chronic Disease Management Plan (MBS Item 721 – or equivalent MBS item numbers for a General Practitioner Management Plan - 2 year reporting period)**

The number of resident clients who are aged 5 years and over and who have been diagnosed with:

- a. Type II diabetes
- b. Coronary heart disease
- c. Type II diabetes & coronary heart disease.

and who have a current MBS item 721 Chronic Disease Management Plan that was initiated within the previous 2 reporting periods. A current MBS item 721 Chronic Disease Management Plan is valid for two years. Therefore, all clients with a current and valid MBS item 721 Chronic Disease Management Plan at the end of the reporting period should be included in the count for this numerator, not just those who received a MBS item 721 Chronic Disease Management Plan within the reporting period.

**Chronic Disease Management Plan (MBS Item 721 – or equivalent MBS item numbers for a General Practitioner Management Plan - 1 year reporting period)**

The number of resident clients who are aged 5 years and over and who have been diagnosed with:

- a. Type II diabetes
- b. Coronary heart disease
- c. Type II diabetes & coronary heart disease.

and who have a current MBS item 721 Chronic Disease Management Plan that was initiated within the previous reporting period.

**Alternative Chronic Disease Management plan (Alternative General Practitioner Management Plan – 2 year reporting period)**

The number of resident clients who are aged 5 years and over and who have been diagnosed with:

- a. Type II diabetes
- b. Coronary heart disease
- c. Type II diabetes & coronary heart disease

and who have an alternative Chronic Disease Management Plan in the form of a General Practitioner Management Plan that was initiated within the previous 2 reporting periods.

A current alternative Chronic Disease Management Plan is valid for two years. Therefore, all clients with a current/valid management plan at the end of the reporting period should be included in the count, not just those who received a management plan within the reporting period.

**Alternative Chronic Disease Management plan (Alternative General Practitioner Management Plan – 1 year period)**

The number of resident clients who are aged 5 years and over and who have been diagnosed with:

- a. Type II diabetes
- b. Coronary heart disease
- c. Type II diabetes & coronary heart disease

and who have an alternative Chronic Disease Management Plan in the form of a General Practitioner Management Plan that was initiated within the previous reporting period.

**Chronic Disease Management Plan (MBS Item 723 - or equivalent MBS item numbers for Team Care Arrangements – 2 year reporting period)**

The number of resident clients who are 5 years of age and over and who have been diagnosed with:

- a. Type II diabetes
- b. Coronary Heart Disease
- c. Type II diabetes & coronary heart disease

and who have a current MBS item 723 Chronic Disease Management Plan Team Care Arrangement that was initiated within the previous 2 reporting periods.

A current MBS item 723 Team Care Arrangement is valid for two years. Therefore, all clients with a current/valid Team Care Arrangement at the end of the reporting period should be included in the count, not just those who received a Team Care Arrangement plan within the reporting period.

**Chronic Disease Management Plan (MBS Item 723 - or equivalent MBS item numbers for Team Care Arrangements – 1 year reporting period)**

The number of resident clients who are 5 years of age and over and who have been diagnosed with:

- a. Type II diabetes
- b. Coronary Heart Disease
- c. Type II diabetes & coronary heart disease

and who have a current MBS item 723 Chronic Disease Management Plan Team Care Arrangement that was initiated within the previous reporting period.

**Alternative Chronic Disease Management Plan (Alternative Team Care Arrangements – 2 year reporting period)**

The number of resident clients who are aged 5 years and over and who have been diagnosed with:

- a. Type II diabetes
- b. Coronary heart disease
- c. Type II diabetes & coronary heart disease

and who have an alternative Chronic Disease Management Plan Team Care Arrangement in the form of a General Practitioner Management Plan, Team Care Arrangement that was initiated within the previous 2 reporting periods.

A current alternative Team Care Arrangement is valid for two years. Therefore, all clients with a current/valid Team Care Arrangement at the end of the reporting period should be included in the count, not just those who received a Team Care Arrangement plan within the reporting period.

**Alternative Chronic Disease Management Plan (Alternative Team Care Arrangements – 1 year reporting period)**

The number of resident clients who are aged 5 years and over and who have been diagnosed with:

- a. Type II diabetes
- b. Coronary heart disease
- c. Type II diabetes & coronary heart disease

and who have an alternative Chronic Disease Management Plan Team Care Arrangement in the form of a General Practitioner Management Plan, Team Care Arrangement that was initiated within the previous reporting period.

**Denominator (for MBS Item 721, 723 or equivalent MBS item numbers for a GPMP and TCA and Alternative GPMP & TCA Care Plans)**

The number of resident clients who are aged 5 years and over and who have been diagnosed with:

- a. Type II diabetes
- b. Coronary heart disease.
- c. Type II diabetes & coronary heart disease

**Level/unit of counting:**

Disaggregated by:

- 1. locality
- 1. Indigenous status
- 2. age group
- 3. disease (type II diabetes and/or coronary heart disease)
- 4. Sex.

Client's ages are calculated according to the end of reporting period.

Client's residential status is determined according to the end of reporting period.

**Counting rules:**

Only include type II diabetes clients, do NOT include clients with type I diabetes, gestational diabetes, secondary diabetes, impaired fasting glycaemia or Impaired glucose tolerance.

The number of clients are counted separately for each group (type II diabetes and/or Coronary Heart disease), even though the same person may be in both groups.

If there is more than one 721 in the reporting period, only count the latest one. Similarly, count only the latest 723 for the reporting period.

**MAKING SENSE/ UNPACKING THE DATA**

- Significant factors may contribute to over or under reporting such as:
- Staffing - GP access
- Has staffs been appropriately trained in completion of the management plan, billing and Medicare?
- Has the diagnosis been recorded?
- Are there other reports available to validate against?
- Compliance to CARPA

Other factors including cultural or community business and weather

## NT AHKPI 1.8.1 : HbA1c Tests

**Definition** - The number and proportion of regular clients who are residents, who are 5 years old and over, who have been diagnosed with Type II diabetes and who have had an HbA1c measurement result recorded within the previous 6 months AND regular clients who are residents, who are 5 years old and over, who have been diagnosed with Type II diabetes and who have had an HbA1c measurement result recorded within the previous 12 months, which are disaggregated by gender by age group by locality.

**Rationale** - Glycosylated haemoglobin (HbA1c) is an index of average blood glucose level for the previous 2 to 3 months and is used to monitor blood sugar control in diabetic people. It is a marker of the increased risk of developing atherosclerosis, myocardial infarction, strokes, cataracts and loss of the elasticity of arteries, joints and lungs.

The US Diabetes Control and Complications Trial and the UK Prospective Diabetes Study have established that the risk of diabetic complications is strongly associated with previous hyperglycaemia and that any reduction in HbA1c is likely to reduce the risk of complications

**Relevance** – Minimum level of best practice service delivery  
Able to compare with national data

### **DATA QUALITY**

#### **Numerator:**

The number of resident clients who are aged 5 years and over who have been diagnosed with type II diabetes, **and** who have had one or more HbA1c tests

*(If a client has more than one HbA1c test during reporting period, counts the last one only).*

#### **Denominator:**

The number of resident clients who are aged 5 years and over **and** who have been diagnosed with type II diabetes.

#### **Level/unit of counting:**

Disaggregated by:

1. locality
2. Indigenous status
3. age group
4. Sex.

Client's ages are calculated according to the end of reporting period.

Calculated separately for 6 months and 12 months.

Client's residential statuses are determined according to the end of reporting period.

### **MAKING SENSE/ UNPACKING THE DATA**

Significant clinical factors which may contribute to over or under reporting such as:

- Staffing
- Training – point of care machines
- Correct diagnosis and recording of results
- Comparison with other reports to validate
- Compliance to CARPA
- Accessibility to equipment
- Transportation of specimens

Note: If a client has more than one HbA1c test during reporting period, counts the last one only.

## **NT AHKPI 1.8.2 : HbA1c Measurements**

**Definition** - The number and proportion of resident Aboriginal clients who have type II diabetes and whose HbA1c measurement result recorded within the previous 12 months was within certain levels.

**Rationale** - Glycosylated haemoglobin is an index of average blood glucose level for the previous 2-3 months and is used to monitor blood sugar control in people with diabetes. The level of control is a marker for increased risk of developing complications including vision loss, neuropathy, renal disease and to a lesser extent, cardiovascular complications. The UKPDS study demonstrated significant reductions in microvascular complications with intensive control of diabetes. More recently the ADVANCE study demonstrated a significant reduction in both renal disease and cardiovascular disease in patients with improved blood pressure and diabetes control.

**Relevance** - Level of diabetes control related to rate of complications. Type II diabetes is extremely common in Aboriginal people in the NT. This indicator aligns to national Aboriginal primary health care indicator.

### **DATA QUALITY**

#### **Numerator:**

The number of resident Aboriginal clients who have been diagnosed with type II diabetes who have had one or more HbA1c tests during the reporting period with the most recent test being:

- less than or equal to 7% OR less than or equal to 53 mmol/mol;
- greater than 7% but less than or equal to 8% OR greater than 53 mmol/mol but less than or equal to 64 mmol/mol;
- greater than 8% but less than 10% OR greater than 64 mmol/mol but less than 86 mmol/mol;
- greater than or equal to 10% OR greater than or equal to 86 mmol/mol

If a client has more than one HbA1c during reporting period count the last one only.

#### **Denominator:**

The number of resident Aboriginal clients who have been diagnosed with type II diabetes and who have had one or more HbA1c tests during the reporting period.

### **MAKING SENSE/ UNPACKING THE DATA**

Significant clinical factors which may contribute to over or under reporting such as:

- Capacity to support the program delivery in the community e.g., portfolio holders

Compliance to CARPA

## **NT AHKPI 1.9 : ACE Inhibitor and/or ARB**

**Definition** - The number and proportion of Indigenous and non-Indigenous clients who are residents, who are 15 years old and over, who have been diagnosed with Type II diabetes with albuminuria (urine ACR >3.4) who are on an ACE (Angiotension Converting Enzyme) inhibitor and/or ARB (Angiotension Receptor Blocker) during reporting period.

**ACE inhibitor drugs include:** Ramipril, Perindopril. **ARB drugs include:** Ibersartan, Candisartan.

**Rationale** - Diabetes PI chosen as sentinel PI for all PCDs.

Renal disease is a major complication of diabetes. It is first diagnosed by the detection of protein in the urine (albuminuria). Control of high blood pressure is important in slowing the progression of renal disease. Use of Angiotension Converting Enzyme inhibitor and/or Angiotension Receptor Blocker have been demonstrated to significantly improve BP control and renal deterioration

**Relevance** - Good evidence for improved health outcomes

70% dialysis due to diabetes

### **DATA QUALITY**

#### **Numerator:**

1. The number of resident clients who are 15 years of age and over, and who have been diagnosed with type II diabetes with albuminuria **and** who are on an ACE inhibitor during the reporting period.
2. The number of resident clients who are 15 years old and over and who have been diagnosed with type II diabetes with albuminuria **and** who are on an ARB during the reporting period.
3. The number of resident clients who are 15 years of age and over and who have been diagnosed with type II diabetes with albuminuria **and** who are on both ACE inhibitor and ARB during the reporting period.

*(If a client has been placed on ACE and/or ARB more than once during reporting period, count the last one only).*

#### **Denominator:**

The number of resident clients who are 15 years of age and over and who have been diagnosed with type II diabetes with albuminuria.

### **MAKING SENSE/ UNPACKING THE DATA**

- Compliance with CARPA
- Are recalls for patient review and care in place?
- Capacity to support the program delivery
- Is everyone who should be on an ACE or an ARB on a prescription?

Note: If a client has been placed on ACE and/or ARB more than once during reporting period, count the last one only.

## NT AHKPI 1.10 : Health Check

### **Definition -**

The number resident clients who have a current complete:

1. MBS item 715 Indigenous health check

or

2. Alternative Indigenous health check similar to MBS item 715, during the reporting period.

*An Aboriginal and Torres Strait Islander child health assessment for those aged 0-14 years must include (note that the following are age-specific):*

### **Taking the patient's medical history, including the following:**

1. mother's pregnancy history;
2. birth and neo-natal history;
3. breastfeeding history;
4. weaning, food access and dietary history;
5. physical activity;
6. previous presentations, hospital admissions and medication usage;
7. relevant family medical history;
8. immunisation status;
9. vision and hearing (including neonatal hearing screening);
10. development (including achievement of age appropriate milestones);
11. family relationships, social circumstances and whether the person is cared for by another person;
12. exposure to environmental factors (including tobacco smoke);
13. environmental and living conditions;
14. educational progress;
15. stressful life events;
16. mood (including incidence of depression and risk of self-harm);
17. substance use;
18. sexual and reproductive health; and
19. dental hygiene (including access to dental services).

### **Examination of the patient, including the following:**

1. measurement of height and weight to calculate body mass index and position on the growth curve;
2. newborn baby check (if not previously completed);
3. vision (including red reflex in a newborn);
4. ear examination (including otoscopy);
5. oral examination (including gums and dentition);
6. trachoma check, if indicated;
7. skin examination, if indicated;
8. respiratory examination, if indicated;
9. cardiac auscultation, if indicated;
10. development assessment, if indicated, to determine whether age appropriate milestones have been achieved;
11. assessment of parent and child interaction, if indicated; and
12. other examinations in accordance with national or regional guidelines or specific regional needs, or as indicated by a previous child health assessment.

### **Undertaking or arranging any required investigation, considering the need for the following tests, in particular:**

1. haemoglobin testing for those at a high risk of anaemia; and
2. audiometry, if required, especially for those of school age

### **Assessing the patient using the information gained in the child health check; and**

### **Making or arranging any necessary interventions and referrals, and documenting a simple strategy for the good health of the patient.**

*The following mandatory items are included in the alternative Adult Health Checks for those aged 15–54 years:*

### **Taking the patient's medical history**

1. Medical history, current health problems and health risk factors
2. Relevant family medical history
3. Medication usage—including OTC and medication from other doctors
4. Immunisation status (refer to the appropriate current age and sex immunisation schedule)
5. Sexual and reproductive health
6. Physical activity, nutrition and alcohol, tobacco or other substance use

7. Hearing loss
8. Mood (depression and self-harm risk)
9. Family relationships, social circumstances, and whether the patient is a carer or cared for by another person

#### **Examining the patient**

1. Measurement of the patient's blood pressure, pulse rate and rhythm
2. Measurement of height and weight to calculate BMI, and if indicated, measurement of waist circumference for central obesity
3. Oral examination (gums and dentition)
4. Ear and hearing examination (otoscopy and if indicated, a whisper test)
5. Urinalysis (dipstick) for proteinuria

#### **Undertaking or arranging any required investigation**

Arrange or undertake any investigations as clinically indicated and consider the need for the following tests, in particular, in accordance with national or regional guidelines:

1. Fasting blood sugar and lipids
2. Pap smear
3. STI testing
4. Mammography

#### **Assessing the patient using the information gained in the health check**

Overall assessment of the patient including the patient's level of cardiovascular risk based on consideration of evidence from patient history, examination results and results of any investigations

#### **Initiating intervention activities as required**

1. Risk factors assessment and discussion with patient or patient's parent or carer
2. Provision of preventative advice and intervention where required
3. Interventions may include:
4. Initiation of treatment, referral and/or immunisation
5. Education, advice and /or assistance in relation to smoking, nutrition, alcohol/other substance use, physical activity (SNAP), reproductive health issues e.g. pre-pregnancy education/ counselling safer sex and/or social and family issues
6. Other interventions as considered necessary.

*The following mandatory items are included in the alternative Adult Health Checks for those aged 55 years and over:*

#### **Taking the patient's medical history**

1. Medical history, current health problems and health risk factors
2. Relevant family medical history

#### **Examining the patient**

##### **Medical**

1. Medication review
2. Measurement of the patient's blood pressure, pulse rate and rhythm
3. Continence
4. Immunisation status (refer to the appropriate current age and sex immunisation schedule)
5. Measurement of height and weight to calculate BMI, and if indicated, measurement of waist circumference for central obesity
6. Urinalysis (dipstick) for proteinuria
7. Trichiasis check where indicated
8. Skin examination
9. Reproductive and sexual health examination
10. Physical function
11. Activities of daily life
12. Falls in the last 3 months
13. Psychological function
14. Cognition
15. Mood

##### **Social function**

16. Availability and adequacy of paid and unpaid help when needed or wanted
17. Caring for another person
18. Consultation with the patient's carer (where applicable)

Disaggregated by:

1. sex
2. age group

- a. 0-4 years
- b. 5-14 years
- c. 15-24 years
- d. 25-44 years
- e. 45-54 years
- f. 55-64 years
- g. 65 and over

**3. Locality.**

**Rationale** - The evidence for screening well people for asymptomatic disease is well established for a specified number of conditions. Screening detects the disease at an earlier stage, and this allows good clinical management with the aim of reducing and preventing complications.

Adult health checks indicate quality of primary health care services, with a focus on health promotion and prevention. It is also a major strategy to identify and treat sexually transmitted infections, which are mainly asymptomatic.

**Relevance** - Reflects capacity of health service to provide preventive care.

Indicates quality of primary care management of chronic diseases.

Early detection of CD, STI's, women's cancer associated with improved outcomes.

**DATA QUALITY**

**Numerator:**

**MBS Item 715 or equivalent MBS item numbers for an Indigenous Adult Health Check during the reporting period.**

The number of resident Indigenous clients who have a current and complete MBS Item 715 Indigenous health check at the end of the current reporting period.

**Alternative Indigenous Health Check**

The number of resident Indigenous clients who have a current and complete Alternative Indigenous Health Check at the end of the current reporting period.

*Remote Procedure Manual (RPM) recommends children aged 0-4 years to have regular checks and 5-14 years to have yearly checks. Remote procedure Manual (RPM) recommends all adults over 15 years have a health check every 2 years. Therefore, all adults who have had a health check in the 2 years prior to the end of the reporting period should be included in the count, not just those who received a health check within the reporting period).*

**Denominator:**

**(MBS Item 715 or equivalent MBS item numbers for an Indigenous Adult Health Check and Alternative Indigenous Adult Health Check)**

Number of resident Indigenous clients as at the end of the reporting period.

**MAKING SENSE/ UNPACKING THE DATA**

Significant clinical factors which may contribute to over or under reporting such as:

- Are systems in place that support completion, e.g., IT, triage
- Staffing, e.g., GP access
- Recording of diagnosis
- Have staffs been appropriately trained in completion of the management plan, billing and Medicare?
- Compliance to CARPA
- Opportunistic/targeted screening
- Other factors including cultural or community business and weather
- Comparison with other reports to validate
- Look at the trend data

Note: CARPA recommends all adults over 15 years have a health check every 2 years. Therefore, all adults who have had a health check in the 2 years prior to the end of the reporting period should be included in the count, not just those who received a health check within the reporting period.



**NT AHKPI 1.12 : Cervical Screening**

**Definition** - The number and proportion of women aged 25-74 years inclusive who are residents and who have had at least one cervical screen during the specified reporting period.

**Rationale** - Increasing participation in cervical screening is important to reduce the number of women who present with cervical cancer and ultimately die from the disease. A range of strategies actively targets women in 25-74 years age group. Guidelines since December 2017 recommend a HPV cervical screen test for women aged 25-74 years every 5 years.

For the purposes of the performance indicator, a self-collected lower vaginal swab will be counted as a cervical screen.

(Source: <http://www.cancerscreening.gov.au/internet/screening/publishing.nsf/Content/future-changes-cervical>;

**Relevance** - This indicator measures the effectiveness of women's health programs for cervical cancer screening.

## **DATA QUALITY**

### **Numerators:**

1. The number of resident women aged 25-74 years inclusive **and** who have had at least one cervical screen test during the previous 4 reporting periods.
2. The number of resident women aged 25-74 years inclusive **and** who have had at least one cervical screen test during the previous 5 reporting periods

### **Denominator:**

The number of resident women aged 25-74 years of age.

## **MAKING SENSE/ UNPACKING THE DATA**

Significant clinical factors which may contribute to over or under reporting such as:

- Are systems supporting completion, e.g., it, triage?
- Trained and appropriately skilled workforce
- Compliance to women's business manual
- Opportunistic/targeted screening
- Are recalls for cervical screening in place?
- Recording of cervical screening performed elsewhere will increase accuracy in results and coverage rate of the women in your health service area
- Comparison with other reports to validate

## **NT AHKPI 1.13 : Blood Pressure Control**

**Definition** – Number and proportion of Aboriginal clients aged 15 and over whom have type 2 diabetes and who have good BP control.

**Rationale** – Good control of BP in people with diabetes reduces the incidence of cardiovascular disease and delays the progression of renal disease

**Relevance** - Good BP control has a major effect on reducing the risk of cardiovascular disease in people with type 2 diabetes. This indicator aligns to national Aboriginal primary health care indicator.

### **DATA QUALITY**

#### **Numerator:**

- a. The number of resident clients who are indigenous, have Type II diabetes and whose blood pressure measurement result, recorded within the previous 6 months, was less than or equal to 130/80 mmHg.
- b. The number of resident clients who are indigenous, have Type II diabetes and who have had a blood pressure measurement result, recorded within the previous 6 months.

#### **Denominator:**

- a. The number of resident clients who are indigenous, have Type II diabetes and who have had a blood pressure measurement result, recorded within the previous 6 months.
- b. The numbers of resident clients, who are indigenous, have Type II diabetes.

*The client does not have a blood pressure measurement of less than or equal to 130/80 mmHg if either the systolic or diastolic reading is above the threshold (130 and 80 respectively)*

*If a client has more than one blood pressure test during reporting period, count the last one only.*

### **MAKING SENSE/ UNPACKING THE DATA**

- Denominator is comparable to KPI 1.7
- Is the BP being entered correctly in the clinical record? E.g. Clinical item, service items
- Availability and access to BP machines and stethoscope
- Availability of calibrated equipment
- Quality Control

## NT AHKPI 1.14 : Chronic Kidney Disease

**Definition** – Number and proportion of Aboriginal clients aged 31 and over at the end of the reporting period who have been screened for renal disease according to CARPA guidelines during a two year period and the number and proportion of those screened who have screening results suggestive of kidney disease.

**Rationale** – Early detection and appropriate treatment of renal disease slows down the progression of renal disease significantly and delays the need for dialysis. Estimating the burden of renal disease through Aboriginal PHC will also assist in long term health planning including planning dialysis facilities

**Relevance** - Reduces the recurrences of ARF and therefore prevents RHD.

Reflects best practice according to National Guidelines.

Reflects health service systems.

### **DATA QUALITY**

#### **Numerator:**

The number of resident Aboriginal clients who have had one or more estimated glomerular filtration rate (eGFR) recorded AND/OR an albumin/creatinine ratio (ACR) test result recorded within the previous 24 months with test results being:

- a. Normal Risk:  
eGFR greater than or equal to 60 mL/min/1.73m<sup>2</sup> AND ACR less than 3.5 mg/mmol for females OR ACR less than 2.5 for males;
- b. Mild Risk:  
eGFR greater than or equal to 45 mL/min/1.73m<sup>2</sup> and less than 60 mL/min/1.73m<sup>2</sup> AND ACR less than 3.5 mg/mmol for females OR ACR less than 2.5 mg/mmol for males; OR  
  
eGFR greater than or equal to 60 mL/min/1.73m<sup>2</sup> AND ACR greater than or equal to 3.5 mg/mmol and less than or equal to 35 mg/mmol for females OR ACR greater than or equal to 2.5 mg/mmol and less than or equal to 25 mg/mmol for males;
- c. Moderate Risk:  
eGFR greater than or equal to 45 mL/min/1.73m<sup>2</sup> and less than 60 mL/min/1.73m<sup>2</sup> AND ACR greater than or equal to 3.5 mg/mmol and less than or equal to 35 mg/mmol for females OR greater than or equal to 2.5 mg/mmol and less than or equal to 25 mg/mmol for males; OR  
eGFR greater than or equal to 60 mL/min/1.73m<sup>2</sup> AND ACR greater than 35 mg/mmol and less than or equal to 300 mg/mmol for females OR greater than 25 mg/mmol and less than or equal to 300 mg/mmol for males;
- d. High Risk:  
eGFR greater than or equal to 15 mL/min/1.73m<sup>2</sup> and less than 45 mL/min/1.73m<sup>2</sup> AND ACR less than or equal to 300 mg/mmol; OR  
eGFR greater than or equal to 45 mL/min/1.73m<sup>2</sup> and less than 60 mL/min/1.73m<sup>2</sup> AND ACR greater than 35 mg/mmol and less than or equal to 300 mg/mmol for females OR greater than 25 mg/mmol less than or equal to 300 mg/mmol for males;
- e. Severe Risk:  
eGFR less than 15 mL/min/1.73m<sup>2</sup> AND/OR ACR greater than 300;
- f. Incomplete:  
ACR less than 300 mg/mmol AND no eGFR test result recorded; OR  
eGFR greater than 15 mL/min/1.73m<sup>2</sup> AND no ACR test result recorded

*If the client has only one test type, unless they are counted as severe risk, they will be counted as incomplete.*

*If the client has more than one test result during the reporting period count the last one only.*

#### **Denominator:**

- g. The number of resident Aboriginal clients who are aged 31 years and over at the end of the reporting period and have had one or more test result recorded within the previous 24 months;
  - estimated glomerular filtration rate (eGFR); OR
  - albumin/creatinine ratio (ACR)
- h. The number of resident Aboriginal clients aged 31 years of age and over at the end of the reporting period.

### **MAKING SENSE/ UNPACKING THE DATA**

- Is there other information needed to give a clearer picture?
- Comparison with other reports to validate
- Compliance to CARPA

Staff, training and systems to support the program

## **NT AHKPI 1.15 : Rheumatic Heart Disease**

**Definition** – The proportion of Indigenous patients with a diagnosis of ARF or RHD who are prescribed as requiring 4 weekly BPG penicillin injections over a 12 month period and receive injections (adherence).

**Rationale** – 4 weekly BPG Penicillin secondary prophylaxis is currently the most cost effective intervention in preventing a recurrence of Acute Rheumatic Fever (ARF) and hence the deterioration of the heart valves (mitral and aortic) and subsequently the development of Rheumatic Heart Disease (RHD).

*(Source: Diagnosis and management of acute rheumatic fever and rheumatic heart disease in Australia – evidence based review. National Heart Foundation of Australia and the Cardiac Society of Australia and New Zealand)*

**Relevance** - Reduces the recurrences of ARF and therefore prevents RHD.

Reflects best practice according to National Guidelines.

Reflects health service systems.

### **DATA QUALITY**

#### **Numerator:**

- a. The number of resident Indigenous clients who have been diagnosed with ARF/RHD who are prescribed to be requiring 2-4 weekly BPG Penicillin Prophylaxis and have received 80% of their injections due at the end of the reporting period.
- b. The number of resident Indigenous clients who have been diagnosed with ARF/RHD who are prescribed to be requiring 2-4 weekly BPG Penicillin Prophylaxis and have received equal to or greater than 50% to less than 80% of their injections due at the end of the reporting period.
- c. The number of resident Indigenous clients who have been diagnosed with ARF/RHD who are prescribed to be requiring 2-4 weekly BPG Penicillin Prophylaxis and have received less than 50% of their injections due at the end of the reporting period.

#### **Denominator:**

The number of resident Indigenous clients who have been diagnosed with ARF/RHD and who are prescribed to be requiring 2-4 weekly BPG Penicillin Prophylaxis during the reporting period.

### **MAKING SENSE/ UNPACKING THE DATA**

- Is the diagnosis documented?
- Is there an active script?
- Program support - staffing
- Mobility of the population
- Data entered outside of your system is not reported
- Have the injections been given elsewhere?

Recording of injections given elsewhere will increase accuracy for this KPI

## **NT AHKPI 1.16 : Smoking Status Recorded**

**Definition** – Number and proportion of Aboriginal clients aged 15 and over whose smoking status has been recorded at the primary health care service as current, ex-smokers and never smokers.

**Rationale** – Tobacco use is the single most important modifiable factor contributing to the chronic disease burden and life expectancy gap between Aboriginal and non-Aboriginal people. Evidence shows that brief interventions can make a significant population health difference to tobacco related morbidity at a population health level

**Relevance** - Tobacco use is the single most important modifiable chronic disease risk factor. This indicator aligns to national Aboriginal primary health care indicator.

**Must be recorded in the last two years**

### **DATA QUALITY**

#### **Numerator**

- a. The number of resident Aboriginal clients aged 15 years and over whose smoking status has been recorded at the primary health care service within the previous 2 reporting periods with the status being recorded as below:
  - Smoker;
  - Ex-smoker less than 12 month;
  - Ex-smoker greater than or equal to 12 months;
  - Non-smoker
- b. The number of resident Aboriginal clients aged 15 years and over, whose smoking status has been recorded at the service within the previous 2 reporting periods.

If a client has more than one smoking statuses, count the last one only.

#### **Denominator**

- b. The number of resident Aboriginal clients aged 15 years and over, whose smoking status has been recorded at the service within the previous 2 reporting periods.
- c. The number of resident Aboriginal clients aged 15 years and over at the end of the reporting period.

### **MAKING SENSE/ UNPACKING THE DATA**

- Staff training and education – asking the right questions
- This should align with the Adult Health Check/Chronic Disease Check - SNAPE

Brief intervention training

## **NT AHKPI 1.17 : Sexually Transmissible Infection (STI) recorded**

**Definition** – Number and proportion of regular clients who are 15 years and over and less than 35 years of age at the beginning of the reporting period, who have received a test for chlamydia and gonorrhoea.

**Rationale** – Most Sexually Transmissible Infections (STI) are asymptomatic, therefore infections will only be identified by testing people, with or without symptoms. Increasing the number of people tested is therefore crucial in identifying infections and early detection of STI, if treated, can reduce transmission and complications.

Monitoring the proportion of people in the age group at risk who have had an STI test enables assessment of the effectiveness of current sexual health service delivery and also provides necessary information for interpreting STI epidemiology.

**Relevance** - Chlamydia and gonorrhoea are common in Aboriginal people in the NT and should both be part of a basic STI screen. HIV is an ongoing threat and the recent syphilis outbreak demonstrates the need to assess testing compliance and improve HIV and Syphilis testing.

An increase in the number of people tested annually for an STI will identify asymptomatic infections. Early detection, if STI treated, will reduce the time a person is infectious and therefore assist in reducing transmission rates. It will also reduce the likelihood of complications adverse outcomes to the individual. When a high proportion of the population is tested, community prevalence can be more accurately estimated. This information is useful for planning and reviewing sexual health policy.

### **DATA QUALITY**

#### **Numerator:**

The number of resident clients who are aged 15 years and over and less than 35 at the beginning of the reporting period who have been tested during the reporting period for:

- a. Chlamydia **AND** Gonorrhoea
- b. HIV
- c. Syphilis
- d. Chlamydia **AND** Gonorrhoea **AND** HIV **AND** Syphilis

*(If a client has more than one pathology result per infection type during reporting period, counts the last one only).*

#### **Denominator:**

The number of resident clients who are aged 15 years and over and less than 35 years at the beginning of the reporting period.

### **MAKING SENSE/UNPACKING**

- Staff training and education – asking the appropriate questions, brief intervention training
- Are STI checks being entered correctly in the clinical record? E.g. clinical item, service items
- This KPI should align with the Adult Health Check

Note: this is a new KPI (as at 2016). The level of confidence will grow with future reports (trend at third year)

Note: If a client has more than one pathology result per infection type during reporting period, counts the last one only.

## **NT AHKPI 1.18 : Cardiovascular Risk Assessment**

**Definition** – The number and proportion of resident Indigenous clients, who are 20 years old and over, who have had a cardiovascular risk assessment recorded within the previous 2 years and whose 5-year CVD risk was categorised as one of the following:

Low risk (<10%)

Moderate risk (10-15%)

High risk (>15%)

**Rationale** – Cardiovascular disease (CVD) is the biggest cause of premature morbidity and mortality for Aboriginal peoples. The incidence of myocardial infarction for NT Indigenous peoples aged 20-34 is more than 10 times that for non-Indigenous NT residents. CVD risk calculation includes modifiable risk factors and age/sex of clients based on the Framingham equations. Holistic CVD risk appraisal is demonstrably superior to the assessment and management of individual risk factors within a high-risk population.

**Relevance** - Reflects capacity of health service to provide preventive care.

Significant health status indicator.

Reflects service performance.

### **DATA QUALITY**

#### **Numerator:**

- a. The number of resident Indigenous clients, who are 20 years old and over, who have had a 5-year CVD risk assessment result within the previous 2 reporting periods, **and** who are assessed as:
  - High (greater than 15% chance of a cardiovascular event)
  - Moderate (10-15% chance of a cardiovascular event)
  - Low (less than 10% chance of a cardiovascular event)
- b. The number of resident Indigenous clients, who are 20 years old and over, **and** who have had a 5-year CVD risk assessment result recorded within the previous 2 reporting periods.

#### **Denominator:**

- b. The number of resident Indigenous clients, who are 20 years old and over, **and** who have had a 5-year CVD risk assessment result recorded within the previous 2 reporting periods.
- c. Number of resident Indigenous clients who are aged 20 years and over of age as at the end of the reporting period.

### **MAKING SENSE/ UNPACKING THE DATA**

- Staff training and education
- Should align with the Adult Health Check
- Brief intervention training



## **NT AHKPI 1.19 : Retinal Screening**

**Definition** – Number of clients with diagnosis of type 1 or type 2 diabetes who have had retinal screening in the previous twelve months and two years.

**Rationale** – Diabetic retinopathy is a major cause of blindness but is largely preventable with retinal screening and referral for Laser treatment. However, only a minority of people are screened yearly as is recommended.

**Relevance** - This indicator will give an estimation of the number of regular patients with diabetes who are being screened for diabetic retinopathy. Blindness or severe visual impairment is largely avoidable by prompt screening.

### **DATA QUALITY**

#### **Numerator:**

- a. Number of regular clients with Diabetes type 1 or Diabetes type 2, who have had a retinal eye exam.
- b. Number of regular clients with Diabetes type 1 or Diabetes type 2 at the end of the reporting period.

#### **Denominator:**

- b. Number of regular clients with Diabetes type 1 or Diabetes type 2 at the end of the reporting period.
- c. Number of resident clients, end of the reporting.

### **MAKING SENSE/ UNPACKING THE DATA**

- Screening indicator only
- Are retinal eye checks being entered correctly in the clinical record using a clinical item or service items?
- Concern that screening is taking place but without any follow up

## NT AHKPI 1.20 : Ear Disease

**Definition** – Number and proportion of Aboriginal clients aged from three months to less than 5 years who have had an otoscopy examination during the reporting period and the proportion of children examined who have ear discharge.

**Rationale** – Ear disease in children is very common and usually starts in the first year of life. Early intervention including appropriate treatment of the first infection may reduce the risk of chronic ear disease and therefore reduce the risk of language delay.

**Relevance** - Ear disease is very prevalent in Aboriginal children in the NT and causes significant disability.

### **DATA QUALITY**

The calculation includes both coverage ratio and ear discharge ratio:

- Ear Discharge Ratio: Number with Ear Discharge / Number Measured
- Coverage ratio: Number Measured / Total Population

### **Numerator**

- The number of resident Aboriginal clients greater than or equal to 3 months to less than 5 years who have had ear examination (otoscopy) **and** whose status is recorded at any examination during the reporting period with the status being:
  - Ear discharge
- The number of resident Aboriginal clients greater than or equal to 3 months to less than 5 years who have had ear examination (otoscopy) **and** whose status is recorded at last examination during the reporting period with the status being:
  - Ear discharge
- The number of resident Aboriginal clients greater than or equal to 3 months to less than 5 years who have had ear examination (otoscopy) during the reporting period.

*(Child's ages are calculated according to the date for ear examination)*

### **Denominator**

1. The number of resident Aboriginal clients greater than or equal to 3 months to less than 5 years who have had an ear examination (otoscopy) during the reporting period.
2. The number of resident Aboriginal clients greater than or equal to 3 months to less than 5 years of age at the beginning of the reporting period or were born during the first nine months of the reporting period.

*(Child's ages are calculated to the end of reporting period to include those who are less than six years of age. (e.g. include all children who were less than five years of age at the beginning of the reporting period or were born during the first 9 months of the reporting period)).*

### **Level/unit of counting**

Disaggregated by:

- Locality
- Age group
  - 3-11 months
  - 12 -23 months
  - 24-72 months
- Sex

### **Counting rules**

Each client to be counted against each numerator once.

Client's residential statuses are determined according to the end of reporting period.

### **MAKING SENSE/ UNPACKING THE DATA**

- This is a screening indicator
- Are otoscopy examinations and their results being entered correctly in the clinical record using a clinical item or service items?
- Concern that screening is taking place but without any follow up