Northern Territory Aboriginal Health

Key Performance Indicator Information System

Australian Government
Department of Health

AMSANT

Northern Territory Government

NT Aboriginal Health Key Performance Indicators

Definitions

Endorsed for use by NT Aboriginal Health Forum

(Final approval for definitions for Domains Two to Four given on 28 May 2019)

June 2021

Version 2.8

Document Approval

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 Recipients should remove superseded versions from circulation.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 Information Division Branch peers and "Approved by" indicates endorsement for release.

Action	Name	Position	Date
Prepared by	Peta Archer	Senior Data Analyst	25/06/2021
Reviewed by	Mohan Nallailingam	Senior Data Analyst	25/06/2021
Reviewed by	Ken Lin	Data Analyst	25/06/2021
Approved by	Amanda Lanagan	Manager	25/06/2021
Endorsed by	NT AHKPI Steering Committee		24/09/2020

Key Performance Indicators Definitions Acceptance

This document version is authorised for release once all signatures have been obtained.

The original 'NT Aboriginal Health Key Performance Indicators, Definitions, December 2008, V1.3' document was approved by the NT Aboriginal Health Forum on 12 September 2008 for use, pending agreement to adopt OATSIH qualitative definitions for Domains Two to Four and the KPI definitions are effective from then. Definitions for domains two, three and four approved by NT Aboriginal Health Forum on 28 May 2019.

	Name	Title	Signature	Date
Prepared for Acceptance	Peta Archer	Senior Data Analyst		25/06/2021
Accepted for Release	Chair	NT AHKPI Steering Committee		Xx/Xx/20Xx

Associated Documents

(These documents should be read in conjunction with this KPI Definitions document).

The latest approved versions of system documents are available at: https://health.nt.gov.au/professionals/aboriginal-health-key-performance-indicator/login-and-documentation

Doc	Name	File Name
1	Northern Territory Aboriginal Health Key Performance Indicators Information System, Data Receiving Protocol, June 2021, Version 2.8	Data Receiving Protocol_V2.8.pdf
2	NORTHERN TERRITORY, ABORIGINAL HEALTH, KEY PERFORMANCE INDICATORS, (NT AHKPIs), DATA MANAGEMENT POLICY, October 2021, Version 2.9	NT AHKPI System Data Management Policy v2.9.pdf
3	NORTHERN TERRITORY, ABORIGINAL HEALTH, KEY PERFORMANCE INDICATORS, (NT AHKPIs), DATA RELEASE PROTOCOL, October 2021, Version 2.9	NT AHKPI Data Release Protocol v2.9.pdf

4	NORTHERN TERRITORY, ABORIGINAL HEALTH, KEY PERFORMANCE INDICATORS, (NT AHKPIs), DATA SECURITY PROTOCOL, October 2021, Version 2.9	NT AHKPI Data Security Protocol v2.9.pdf

Document Control

Release Details

Ver	Date	Reason for Change	Document/ Para/KPI Ref	Made By	Description of Change
2.8	25/06/2021	Update of KPI' definition	1.12	Peta Archer & Mohan Nallailingam & Ken Lin	Removal of 4 years reporting, and addition of 6 years reporting.
2.7	31/03/21	Update of KPI' definition	1.10	Ken Lin & Peta Archer	Numerator: MBS Item 715 **or equivalent MBS item numbers** for an Indigenous Health Check, during the reporting period. As well as MBS item 715, additional MBS Items added with this version are: **228, 92004, 92016, 92011 and 92023** To allow flexibility for future changes, the specific MBS items have been replaced with a generic reference in the definition as follows: MBS item 715 or equivalent MBS item numbers for an Indigenous health check
			1.7	Ken Lin & Peta Archer	As well as MBS item 721 and 723, additional MBS Items added with this version are: **229, 92024, 92068, 92055, 92099** **230, 92025, 92069, 92056, 92100**
	28/09/20	Update of KPI' definition	1.4.2	Seetha Devi & Peta Archer	Immunisation timeliness measurement changed to 4 months and 12 months age group and received within 30 days of when they are due.
			1.12	Seetha Devi & Peta Archer	Removal of 2 and 3 years reporting, and addition of 4 years reporting.
			1.2.2	Seetha Devi & Peta Archer	Measurement calculation changes for haemoglobin i.e. (Hb <110g/L at <20 wks gestation or Hb<105g/L at >=20 wks gestation)
		Additional KPI	1.4.3	Seetha Devi & Peta Archer	Immunisation timeliness measurement for 18 months and 4 years age group and received within 3 months of when they are due.
2.6	16/10/19	Additional KPI	1.2.2a,b,c,d	Seetha Devi	Add new KPI 1.2.2 (Anaemia in pregnancy)for reporting

Ver	Date	Reason for Change	Document/ Para/KPI Ref	Made By	Description of Change
		Update to KPI definition	1.2.1	Seetha Devi	Change the counting rule to specify including "stillbirths greater than 400 grams with a gestational age greater than 20 weeks".
			1.4.2	Seetha Devi	Error correction. Updated the reporting age from (1 month to 6 years) to (1 month to 12 months) to make it consistent with the data delivered.
		Re-number KPI 1.2 First Antenatal Visit	1.2	Seetha Devi	Re-numbered to KPI 1.2.1
2.5	28/05/19	Update to domain titles Version control update (following approval of definitions for domains 2,3,4)		K King	Domain headings updated to align with key domains within the NTAHF Core functions of primary health care (a framework for the NT)
	07/05/19	Update to KPI' definition	1.7	Seetha Devi	Include resident clients aged 5 to 14 years.
			1.8.1	Seetha Devi	Include resident clients aged 5 to 14 years.
			1.10	Seetha Devi	Include resident clients aged 0 to 14 years.
			1.11	Seetha Devi	Merge into KPI 1.10
2.4	28/09/17	Update of KPI' definition	1.4.2	J Singh	Immunisation timeliness measurement changed to 30 days when due and new age groups
			1.12	J Singh	Transitional changes from Pap smear to cervical screening till 2020
			1.20	J Singh	Age calculation changes for ear disease indicator
			1.6	J Singh	Include children who are ever anaemic in reporting period
2.3	09/06/16	Additional KPI	1.20	J Singh	Add new KPI indicator 1.20
2.2	20/05/16	Update of KPI' definition	1.17	J Singh	Addition of HIV and Syphillis to STI
2.1	24/09/15	Update of KPI' definition	1.16	L Riley	Addition of reporting period as 2 years.
		Additional KPI's.	1.18, 1.19	L Riley	Add new KPI indicator 1.18 & 1.19
		Update of KPI' definition	1.12 1.15	L Riley	Include colposcopy test in counting rules. Update counting rules to reflect new diagnoses.
2.0.7	03/10/14	Additional KPI's.	1.14, 1.17	L Riley	Add new KPI indicator 1.14 & 1.17
2.0.6	30/07/14	Removal of KPI	1.14	L Riley	Removal of KPI 1.14 due to definition change.
2.0.5	24/03/14	Additional KPI's.	1.14, 1.16	L Riley	Add new KPI indicator 1.14 & 1.16

Ver	Date	Reason for Change	Document/ Para/KPI Ref	Made By	Description of Change
		Update of KPI' definitions	1.6 1.8.1 1.8.2 1.15	L Riley	Addition of Age Group. Addition of reporting period. Addition of mmol/mol counting rules. Addition of numerator segments.
2.0.4	25/10/13	Additional KPI's.	1.13	L Riley	Add new KPI indicator 1.13
2.0.3	10/09/13	Clarification of KPI definitions	1.1, 1.2, 1.4.1, 1.4.2, 1.8.2	L Riley	Re-ordering of KPI's Update definitions as per clarification.
2.02	2/04/13	Clarification of counting rule for 1.13 numerator and denominator	1.13	S Noor	Updated counting rule to for numerator and denominator to less than 12 months
2.0.1	7/03/13	Incorporating feedback from TWG & CRG		S Noor	Minor edits, clarified Reporting Period definition
2.0.0	12/02/13	Clarification of numerator and denominator definition to align to KPI definition.	1.15	S Noor	changed counting rules of denominator to count population of "ARF/RHD clients"
					Changed counting rules of numerator to count proportion of "clients" and included count of clients prescribed injections (coverage) as second numerator.
		Clarification of client counting rules	1.12	L Riley	updated client counting rules to reflect a distinct client count.
		Align to current CARPA recommendations	1.11	L Riley	updated the counting rules to correctly reflect current CARPA recommendations
		Sentence correction	1.11	L Riley	minor edit to correct sentence
		Align to current CARPA recommendations	1.10	L. Riley	updated the counting rules to correctly reflect current CARPA recommendations
		Clarification of client counting rules	1.7	L Riley	updated client counting rules to reflect a distinct client count.

Ver	**Date**	**Reason for Change**	**Document/ Para/KPI Ref**	**Made By**	**Description of Change**
		GAA collection not finalised for 2012 and DoH child health data now sourced from PCIS	1.5 & 1.6	L Riley	Removed references to GAA data collection
		CRG endorsement of new KPI's	1.13, 1.14, 1.15	S Noor	Add new KPI indicator 1.15
				S Noor	Add new KPI indicator 1.14
				L Riley	Add new KPI indicator : 1.13 Timeliness of Immunisations
		CRG endorsement of expanded date ranges for indicated KPI's	1.7, 1.10, 1.11, 1.12	L Riley	Update KPI indicators 1.7, 1.10, 1.11, 1.12 to expand date ranges looked at by the AHKPI reports.
		Changes in data sources for DoH, and NGO's using Ferret, to source AHKPI data.	All KPI's	L Riley	Update data source availability
		Clarify definition.	1.2	R Inglis	Converted from "Women's Business Manual" definition to specific tests.
		Clarify definition.	1.12	R Inglis	Removed '(last two financial years)' from definition.

Document Distribution

(List of KPI Definitions document recipients)

Release No.	Date Sent	Sent To
V2.8	25/06/21	NT AHKPI Steering Committee Chair NT AHKPI Clinical Reference Group Chair NT AHKPI Technical Working Group Chair
V2.7	05/05/20	NT AHKPI Steering Committee Chair NT AHKPI Clinical Reference Group Chair NT AHKPI Technical Working Group Chair
V2.6	Xx/10/19	NT AHKPI Steering Committee Chair NT AHKPI Clinical Reference Group Chair NT AHKPI Technical Working Group Chair
V2.5	07/05/19	NT AHKPI Steering Committee Chair NT AHKPI Clinical Reference Group Chair NT AHKPI Technical Working Group Chair
V2.4	02/10/17	NT AHKPI Steering Committee Chair NT AHKPI Clinical Reference Group Chair NT AHKPI Technical Working Group Chair
V2.3	21/05/16	NT AHKPI Steering Committee Chair NT AHKPI Clinical Reference Group Chair NT AHKPI Technical Working Group Chair
V2.2	20/05/16	NT AHKPI Steering Committee Chair NT AHKPI Clinical Reference Group Chair NT AHKPI Technical Working Group Chair
V2.1	06/10/15	NT AHKPI Steering Committee Chair NT AHKPI Clinical Reference Group Chair NT AHKPI Technical Working Group Chair
V2.0.7	03/10/14	NT AHKPI Steering Committee Chair NT AHKPI Clinical Reference Group Chair NT AHKPI Technical Working Group Chair
V2.0.6	30/07/14	NT AHKPI Steering Committee Chair NT AHKPI Clinical Reference Group Chair NT AHKPI Technical Working Group Chair
V2.0.5	Xx/Xx/Xx	NT AHKPI Steering Committee members/observers NT AHKPI Clinical Reference Group members/observers NT AHKPI Technical Working Group members/observers
V2.0.4	25/10/13	
V2.0.3	10/09/13	NT AHKPI Steering Committee members/observers
V2.0.2	Xx/Xx/Xx	Liana Riley, NT AHKPI System Team (DoH) Sharon Noor, NT AHKPI System Team (DoH)
V2.0.1	20/03/13	NT AHKPI Steering Committee members/observers NT AHKPI Clinical Reference Group members/observers NT AHKPI Technical Working Group members/observers
V2.0.0	20/02/13	NT AHKPI Clinical Reference Group members/observers NT AHKPI Technical Working Group members/observers

Contents

Introduction

The NT AHKPI system is collaboration between the Northern Territory Aboriginal Health Forum (AHF) partners to develop a Northern Territory wide primary health care performance reporting system for collecting and reporting key performance indicator (KPI) data. These KPI's were developed to provide information to support health services in planning activities and in contributing to evidence based reporting requirements.

Summary of Changes

This section summarizes (NT AHKPI Clinical Reference Group endorsed and Steering Committee approved) changes to - 'NT Aboriginal Health Key Performance Indicators, Definitions, June 2021, Version 2.8'.

KPI 1.12 Cervical Screening Tests

Change: Update to existing Indicator

Description: Deletion of 4 yearly reporting and the inclusion of 6 yearly reporting.

Definitions of -30 Core NT AHKPIs

The suite of Northern Territory Aboriginal Health Key Performance Indicators has been selected to measure across the established health domains:

Domain 1: Clinical Services

1. Number of episodes of health care and client contacts.

2.1 Timing of first antenatal visit for regular clients delivering Indigenous babies.

2.2 Number and proportion of regular clients who were anaemic during pregnancy

3. Number and proportion of low, normal and high birth weight Indigenous babies.

4.1 Number and proportion of Indigenous children fully immunised at 1, 2 and 6 years of age.

4.2 Number of children who have received the immunisations due at four months and 12 months of age within 30 days of when they were due.

4.3 Number of children who have received the immunisations due at eighteen months and 4 years of age when they were due

5. Number and proportion of children less than 5 years of age who are underweight.

6. Number and proportion of children between 6 months and 5 years of age who are anaemic.

7. Number and proportion of clients aged 15 years and over with Type II Diabetes and/or Coronary Heart Disease who have a chronic disease management plan.

8.1 Number and proportion of resident clients aged 15 years and over with Type II Diabetes who have had an HbA1c test.

8.2 Number and proportion of Aboriginal clients with Type II diabetes and whose HbA1c measurements are within certain levels.

9. Number and proportion of diabetic patients with albuminuria who are on ACE inhibitor and/or ARB.

10. Number and proportion of Indigenous clients aged 15 to 55 years who have had a full adult health check.

11. Number and proportion of Indigenous clients aged 55 years and over who have had a full adult health check.

12. Number and proportion of women who have had at least one PAP test during reporting period.

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

14 Number and proportion of Indigenous clients who had eGFR and/or ACR test with recorded results within 24 month period.

15. Number and proportion of Indigenous ARF / RHD patients who are prescribed to be requiring 2-4 weekly BPG Penicillin Prophylaxis and have received injections over a 12 month period.

16 Number and proportion of current resident Aboriginal clients aged 15 and over whose smoking status has been recorded.

17 Number and proportion of resident clients aged 15-34 who have had a test for sexually transmitted infections (STIs).

18 Number and proportion of Indigenous residents aged 20 years and over who have had a cardiovascular risk assessment.

19 Number and proportion of Indigenous residents with diabetes who have had retinal screening.

20 Number and proportion of Aboriginal children aged between 3 months and less than 5 years of age who have had an ear examination.

Domain 2: Corporate Services and Infrastructure

1. Report on unplanned staff turnover (where possible by occupation) over each 12 month period.
2. Report on recruits (excluding locums) completing an orientation and induction program, including cultural awareness.
3. Report on overtime workload.
4. Report on quality improvement systems including the use of best practice guidelines e.g. CARPA.

Domain 3: Advocacy, Knowledge and Research, Policy and Planning

1. Report on service activities (position papers, collaborative meetings and services, published papers, policy submissions, participative research).

Domain 4: Community Engagement, Control and Cultural Safety

1. Report on community involvement in determining health priorities and strategic directions through any of the following: health boards; steering committees; advisory committees; community councils; health councils.
2. Show evidence of appropriate reporting to community on progress against core PIs.

The following section contains full descriptions of definitions to apply to interpret the meaning and intent of the suite of Northern Territory Aboriginal Health Key Performance Indicators.

AHKPI Definitions

Common Definitions

These definitions are common to all NT AHKPI's

Data Item	**Definition**
Residency status	A resident is an individual who is identified as a regular client of the health service, who usually resides in the community serviced by the health centre, and has been present in the community for at least 6 months of the reporting period, and has had some contact with the health service in the previous 2 years or has recently moved to the community and intends to stay there, and is not deceased, as at the end of the reporting period. *Note that the term 'recently' ("has recently moved to the community) has not been defined. Similarly, it is not clear how services would define "and intends to stay there": this could be for a short period (3 months) or indefinitely. Each health service will need to apply their own business rules to decide for each patient their 'locality address' and their 'temporary address'. This will give flexibility to the health service clinicians regarding service population. It is better to encourage services to count people as regular clients so that they offer them proactive care.* A visitor is an individual who is considered are not likely to be in the community serviced by the health centre more than six months, and who say another place is their home community, as at the end of the reporting period.
Indigenous status	Indigenous status is defined in the National Health Data Dictionary as a measure of whether a person identifies as being of Aboriginal and/or Torres Strait Islander origin. This data element is based on the ABS standard for Indigenous status. This is in accord with the first two of the three components of the Commonwealth working definition: 'An Aboriginal and/or Torres Strait Islander is a person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he or she lives.' (National Health Data Dictionary) In practice, it is not feasible to collect information on the community acceptance part of this definition in general purpose statistical and administrative collections. Therefore, the definition used by the ABS and adopted for the National Health Data Dictionary focuses on the first two elements of the definition. **Data domains:** **1**. Aboriginal but not Torres Strait Islander origin **2.** Torres Strait Islander but not Aboriginal origin **3.** Both Aboriginal and Torres Strait Islander origin **4.** Neither Aboriginal nor Torres Strait Islander origin **9.** Not stated/inadequately described. **The classification for Indigenous status is as follows:** **a.** Indigenous – categories 1-3 **b.** Non-Indigenous – category 4 **c.** Not stated/inadequately described – category 9.
Locality	The locality is the health clinic at which the service contact occurred.

Reporting Period	Reporting Period is defined as one financial or calendar year, depending on the reporting cycle.

AHKPI 1.1 Episodes of Health Care and Client Contacts

Domain: **1. Clinical Services.**

Indicator: **1. Number of episodes of health care and client contacts**

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.
Definition	Number of episodes of care and client contact[1] during reporting period, disaggregated by sex, age group, Indigenous status, residential status and locality. **Episode:** An 'episode of care' is contact between an individual client and a service by one or more staff to provide health care. *For example, an episode of care that is provided for a client's sickness, injury, counselling, health education, screening, or other health related issues. An episode of care begins when a client visits a health service to receive health care. A client may be seen by an Aboriginal Health Worker, and/or a Nurse and/or a GP during an episode of care. This represents one episode of care. If this client comes back another day, this is a second episode care.* In NT AHKPI, an episode of health care includes: **a.** episodes of health care delivered over the phone **b.** episodes of residential care **Client contact:** The numbers of health professionals who have contact with a client during an episode of health care. *For example, if a client saw three different health professionals, Aboriginal Health Worker, and a Nurse and a GP in an episode of care, this would equal three client contacts*. **Telephone consultation:** are clinical consultations that are to do with client clinical advice and result in a dated entry being made in the client health record.
Calculation	The calculation includes episodes of health care provided ratio: **1.** Episodes of health care provided ratio: Number of episodes of health care provided to residents / Total resident population. **Numerator** **a.** The number of episodes of health care during reporting period. **b.** The number of client contacts during reporting period. **Denominator** **a.** The resident population count as at the end of the reporting period. **Level/unit of counting** **1.** Episode of care and population will be disaggregated by: **a.** sex **b.** age group **c.** Indigenous status **d.** residential status **e.** locality **2.** Client's ages are calculated according to the date of the episode of care. **3.** Population ages are calculated according to the end of the reporting period. **4.** Client's residential statuses are determined according to the date of the episode of care. **Counting rules—inclusions, exclusions** **a.** Include episodes of care and client contact for both community residents and visitors and out-of-hours service contacts.

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[1] The definition of "episode" and "client contact" are based on the OATSIH Service Reporting (OSR) 2009/10

	b. Include live population count as at the end of the reporting period. **c.** Excludes group contacts e.g. antenatal classes, men's groups etc.

Validation Criteria

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.
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	Health services at remote health centres are provided by a number of government and non-government organisations and will be ongoing.
Data quality and availability	For most NT remote community health centres or services, the data is available in a clinic information system including Communicare and PCIS. This indicator will be extracted from those systems.
Sound methodology	Calculation methodology is sound, contingent on completeness of data entry.

Performance Indicator Validation

Date last reviewed	**September 2013**
Review Team	**Representative**
NT AHKPI Clinical Reference Group	Dr Andrew Bell (Katherine West Health Services and AMSANT) Hilary Bloomfield (Danila Dilba Health Service and AMSANT) Dr Wendy Page (Miwatj Health Service and AMSANT) Dr Alex Hope (Santa Theresa Health Service and AMSANT) Dr Liz Moore, Melissa Roberts, Kerry Copley (AMSANT) Brycen Brook, Janet Rigby, Andrew MacAuliffe, Dr Hugh Heggie, Sharon Noor (DHF) Aumea Herman (OATSIH)
NT AHKPI Technical Working Group	Carey Lonsdale, Rachel McGahey (OATSIH) Richard Inglis, Olivia Toune, Dr Jo Wright, Anne Farrawell (DHF) Greg Henschke, Melissa Roberts, Kerry Copley (AMSANT) Lyall Burrows (Central Australian Aboriginal Congress and AMSANT)

AHKPI 1.2.1 First Antenatal Visit

Domain: **1. Clinical Services.**

Indicator: **2.1. Timing of first antenatal visit for regular clients delivering Indigenous babies.**

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.
Definition	The number and proportion of regular clients who are residents, who gave birth to Indigenous babies[2] 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: **1.** Blood Pressure test **2.** Order mid-stream urine for microscopy, culture and sensitivities. **3.** Order blood group and antibody test
Calculation	**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: **a.** Indigenous **b.** 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.

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[2] The definition of an Indigenous Baby is originated from the Australian Institute for Health and Welfare (AIHW) (see SCARF – Technical Specifications for 11 Essential Indicators V4.0)

	Level/unit of counting Disaggregated by: **a.** age group **b.** Indigenous status **c.** Locality **Counting rules** Client's ages are calculated according to the date they gave birth. Client's residential statuses are determined according to the date they gave birth. If a client gave more than one birth during a reporting period, count them separately **Include**: **a.** Live births **b.** Stillbirths greater than 400 grams with a gestational age greater than 20 weeks. **Exclude**: **a.** first trimester miscarriages **b.** terminations.

Validation Criteria

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.
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	Antenatal care programs are provided by a number of government and non-government organisations and will be ongoing.
Data quality and availability	For most NT remote community health centres or services, the data is available in a clinic information system including Communicare and PCIS or the Midwives data collection. This indicator will be extracted from these systems. Health services without computerised PIRS are recommended to maintain data through Birth Books. Timing of first visit is recommended to be based on gestation from first ultra sound scan.
Sound methodology	Calculation methodology is sound, contingent on completeness of data entry.

Performance Indicator Validation

Date last reviewed	September 2013
Review Team	**Representative**
NT AHKPI Clinical Reference Group	Dr Andrew Bell (Katherine West Health Services and AMSANT) Hilary Bloomfield (Danila Dilba Health Service and AMSANT) Dr Wendy Page (Miwatj Health Service and AMSANT) Dr Alex Hope (Santa Theresa Health Service and AMSANT) Dr Liz Moore, Melissa Roberts, Kerry Copley (AMSANT)

	Brycen Brook, Janet Rigby, Andrew MacAuliffe, Dr Hugh Heggie, Sharon Noor (DHF) Aumea Herman (OATSIH)
NT AHKPI Technical Working Group	Carey Lonsdale, Rachel McGahey (OATSIH) Richard Inglis, Olivia Toune, Dr Jo Wright, Anne Farrawell (DHF) Greg Henschke, Melissa Roberts, Kerry Copley (AMSANT) Lyall Burrows (Central Australian Aboriginal Congress and AMSANT)

AHKPI 1.2.2 Anaemia in pregnancy

Domain: **1. Clinical Services.**

Indicator: **2.2. The number and proportion of regular clients who were anaemic during pregnancy**

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.
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)*
Calculation	**The calculation includes anaemic ratio and coverage ratio:** **a.** Coverage Ratio: Number Measured / number of resident women who gave birth to Indigenous babies in the reporting period. **b.** Anaemic Ratio: Number Anaemic at last test / Number Measured **c.** Prevalence Ratio: Number Anaemic during Pregnancy / Number Measured **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

Validation Criteria

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.
Feasibility	This indicator is feasible as the data is currently collected by primary health care centres.
Sensitivity	Data can show changes over years that are significant enough to indicate the results and level of current activity or reveal new activity that should be considered.
Policy and program continuity	Measurement of haemoglobin is a standard test during pregnancy and is part of antenatal guidelines both in the NT and for the whole of Australia.
Data quality and availability	The data collection method will depend on a clinic’s information system e.g. Communicare, or PCIS, the data required to calculate this performance indicator will be extracted directly from their database.
Sound methodology	Methodology is based on the national Clinical Practice Guidelines: Antenatal care – Module II.

Performance Indicator Validation

Date last reviewed	September 2020
Review Team	**Representative**
NT AHKPI Clinical Reference Group	Dr Liz Moore, Margaret Cotter, Louise Patel, Kerry Copley (AMSANT) Dr Wendy Page (Miwatj and AMSANT)
NT AHKPI Technical Working Group	Margaret Cotter, Kerry Copley (AMSANT) Deb Gent (Central Australian Aboriginal Congress and AMSANT) Peta Archer, Seetha Devi (DCDD) Maryanne Lewis (Sunrise HS and AMSANT) Jaspreet Singh, Victor Teale (Miwatj and AMSANT) Rachel Meyer (IHD)

Approval (signature) by Data Sponsor	____ (DoH, Chair AHKPI Steering Committee)

AHKPI 1.3 Birth Weight

Domain: **1. Clinical Services.**

Indicator: **3. Number and proportion of low, normal and high birth weight Indigenous babies**

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)*
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.
Calculation	**Numerator:** **a.** 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: **a.** less than 20 20-34 years 35 years and over **and** who are:

a. Indigenous.
b. Non-Indigenous.

Level/unit of counting

Disaggregated by:

a. mother’s age group,
b. mother’s Indigenous status
c. mother’s locality.

Mother’s ages are calculated according to the birthdays of their babies.

Mother’s residential statuses are determined according to the dates they gave birth

Counting rules:

Include: live births only.

Exclude births with:

a. unknown birth weight.
b. <= 20 weeks gestation and less than 400 grams.

Validation criteria

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.
Sensitivity	Birth weight is a moderately sensitive indicator. There may be year to year anomalies due to relatively low numbers in the NT. Appropriate to present it separately for Indigenous and non-Indigenous babies. It is the high Indigenous rate that accounts for the high NT rate.
Policy and program continuity	Antenatal care will continue to be delivered. However, there is always room for improvement in the delivery of antenatal services to women particularly those less than 16 years who are at highest risk of delivery of low birth weight babies.
Data quality and availability	For most NT remote community health centres or services, the data is available in a clinic information system including Communicare and PCIS or the Midwives data collection. This indicator will be extracted from those systems. Health services without computerised PIRS are recommended to maintain data through Birth Books.
Sound methodology	Calculation methodology is sound and is used internationally as an indicator.

Performance Indicator Validation

Date last reviewed	September 2010

Review Team	**Representative**
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AHKPI 1.4.1 Fully Immunised Children

Domain: **1. Clinical Services.**

Indicator: **4.1. Number and proportion of Indigenous children fully immunised at 1, 2 and 6 years of age**

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*.)
Definition	Proportion of resident Indigenous children who are: **a.** 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.
Calculation	**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:** **a.** 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. **Level/unit of counting:** Disaggregated by: **a.** Locality. **b.** Indigenous status. **Counting rules:** Child's ages are calculated according to the end of reporting period. Child's residential statuses are determined according to the end of reporting period. **Fully immunised at 6 months to less than 1 year:** **a.** 6 months to < 8 months and have received all age appropriate immunisations that are due at birth. 8 months to < 10 months and have received all age appropriate immunisations that are due by 2 months of age. 10 months to < 1 year and have received all age appropriate immunisations that are due by 4 months of age. **Fully immunised at 1 year to less than 2 years:** **a.** 1 year to < 18 months and have received all age appropriate immunisations that are due by 6 months of age. 18 months to < 2 years and have received all age appropriate immunisations that are due by 12 months of age. **Fully immunised at 2 years to less than 6 years:** **a.** 2 years to < 4 years and 6 months and have received all age appropriate immunisations that are due by 18 months of age

	4 years and 6 months to < 6 years and have received all age appropriate immunisations that are due by 4 years of age.

Validation Criteria

Relevance	Reduces vaccine preventable diseases. Reflects health service systems.
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	The program will continue to be operated as at present. However, the immunisation schedule does change regularly, and so the definition of which vaccinations are required for full immunisation changes accordingly (usually with a lag period to allow for implementation of the program change). This does affect immunisation coverage rates; however the changes are well documented.
Data quality and availability	The data will be available from 2008 to each health centre from the NT Childhood Immunisation Database. For most NT remote community health centres or services, the data is available in a clinic information system including Communicare and PCIS. This indicator will be extracted from those systems.
Sound methodology	Calculation methodology is sound, contingent on completeness of data entry.

Performance Indicator Validation

Date last reviewed	September 2013
Review Team	**Representative**
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AHKPI 1.4.2 Timeliness of Immunisations due at 4 months and 12 months

Domain: **1. Clinical Services.**

Indicator: **4.2. 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.
Definition	Proportion of children who have received the immunisations due at four months and 12 months of age within 30 days of when they were due.
Calculation	**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

Validation Criteria

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

Feasibility	This indicator is feasible as the data is currently collected by primary health care centres and the NT Immunisation data base.
Sensitivity	This indicator will provide additional information to assess immunisation timeliness and completeness in children under 12 months. It will be sensitive to changes over time.
Policy and program continuity	The timing of scheduled immunisations schedule is relatively stable and it is relatively easy to change the definition of the query if new vaccines are added to the schedule. There will be a lag time to include the new immunisations in the indicator.
Data quality and availability	The data will be available to each health centre from the NT Childhood Immunisation Database. For most NT remote community health centres or services, the data is available in a clinic information system including Communicare and PCIS. This indicator will be extracted from those systems.
Sound methodology	Calculation methodology is sound contingent on accurate data entry.

Performance Indicator Validation

Date last reviewed	September 2020
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Approval (signature) by Data Sponsor	____ (DoH, Chair AHKPI Steering Committee)

AHKPI 1.4.3 Timeliness of Immunisations due at 18 months and 4 years

Domain: **1. Health Services.**

Indicator: **4.3. 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.
Definition	Proportion of children who have received the immunisations due at eighteen months and 4 years of age when they were due
Calculation	**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 **Level/unit of counting:** Disaggregate by: 1. Locality 2. Indigenous status 3. Age: a. 18 months b. 4 years **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 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

Validation Criteria

Relevance	This indicator is relevant to reducing rates of vaccine preventable disease in children who are at high risk of adverse outcomes.
Feasibility	This indicator is feasible as the data is currently collected by primary health care centres and the NT Immunisation data base.
Sensitivity	This indicator will provide additional information to assess immunisation timeliness and completeness in children. It will be sensitive to changes over time.
Policy and program continuity	The timing of scheduled immunisations schedule is relatively stable and it is relatively easy to change the definition of the query if new vaccines are added to the schedule. There will be a lag time to include the new immunisations in the indicator.
Data quality and availability	The data will be available to each health centre from the NT Childhood Immunisation Database. For most NT remote community health centres or services, the data is available in a clinic information system including Communicare and PCIS. This indicator will be extracted from those systems.
Sound methodology	Calculation methodology is sound contingent on accurate data entry.

Performance Indicator Validation

Date last reviewed	September 2020
Review Team	**Representative**
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Approval (signature) by Data Sponsor	____ (DoH, Chair AHKPI Steering Committee)

AHKPI 1.5 Underweight Children

Domain: **1. Clinical Services.**

Indicator: **5. Number and proportion of children less than 5 years of age who are underweight**

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.
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)
Calculation	The calculation includes underweight ratio and coverage ratio: **a.** Underweight Ratio: Number Underweight/Number Measured **b.** Coverage Ratio: Number Measured/Total Population **Numerator:** **a.** 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. **b.** 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*). **Level/unit of counting:** Child's residential statuses are determined according to the end of reporting period. Disaggregated by **a.** locality **b.** Indigenous status **c.** age **Counting rules:** If a child is measured for weight more than once during a reporting period, count the latest one only. For the Denominator 'c', count those children whose age within the age cohort, according to the age calculation method mentioned in Level/Unit Counting

Validation criteria

Relevance	The measurement of growth of children under 5 years is a sensitive indicator of the nutritional status of children. Significant health issue for children linked to poor health status.
Sensitivity	Data can show changes over years that are significant enough to indicate the results and level of current activity or reveal new activity that should be considered.
Policy and program continuity	The GAA program has been operating since 1998. Surveillance will continue and may be expanded to include other health information.
Data quality and availability	The data collection method will depend on a clinic's information system e.g. Communicare, or PCIS, the data required to calculate this performance indicator will be extracted directly from their database. Coverage rates will be an issue as coverage rates do vary.
Sound methodology	In 2006, the World Health Organisation (WHO) released the new growth standards derived from an internationally representative sample data of infants and young children. The WHO recommends the application of these standards for all children worldwide, regardless of ethnicity, socioeconomic status and type of feeding. A large number of countries have officially adopted the new standards and many others are in the process of doing so. A consultation process through 2008 led by Maternal Child and Youth Health Branch, DoH has resulted in NT Government, Non-Government Organisations and Aboriginal Medical Services stakeholder's agreement for all NT health services to adopt the new 2006 WHO Child Growth Standards across the NT health sector.

Performance Indicator Validation

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AHKPI 1.6 Anaemic Children

Domain: **1. Clinical Services.**

Indicator: **6. Number and proportion of children between 6 months and 5 years of age who are anaemic.**

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 haemoglobinometer.
Definition	The number and proportion of children who are residents, who are: **a.** >= 6 months and < 12 months of age and whose haemoglobin level is less than 105 g/L **or** **b.** >= 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,* 5th edn, Central Australian Rural Practitioners Association, Alice Springs).
Calculation	**The calculation includes anaemic ratio and coverage ratio:** **1.** Anaemic Ratio: Number Anaemic/Number Measured **2.** Coverage Ratio: Number Measured/Total Population **Numerator:** **1. Number Measured:** The number of resident children who were >= 6 months and < 5 years of age at the end of the reporting period and who have been measured for anaemia during the reporting period where the age at test was >=6 months. **2. Number Anaemic at Latest Test:** The number of resident children who were >= 6 months and < 5 years of age at the end of the reporting period and who have been measured for anaemia during the reporting period where the age at latest test was >=6 months and for latest test: a. The age at test was >=6 months and <12 months and haemoglobin level was less than 105 g/L b. The age at test was >= 12 months and < 5 years and haemoglobin level was less than 110 g/L **3. Number Anaemic Ever:** The number of resident children who were >= 6 months and < 5 years of age at the end of the reporting period and who have been measured for anaemia during the reporting period where the age at test was >=6 months and for any test: c. The age at test was >=6 months and <12 months and haemoglobin level was less than 105 g/L d. The age at test was >= 12 months and < 5 years and haemoglobin level was less than 110 g/L *Note: counting rules should count each child only once even if more than one anaemic value present.* *(Child's ages are calculated at the end of the reporting period, age at date of anaemia measurement is for cut-off purposes only i.e. a child who was over 12 months of age at the end of the reporting period, but was tested at age 11 months will be evaluated on the 105g/L cut-off to determine if they were anaemic at their latest test, but will appear in their age group as per their age at the end of the reporting period, a child with latest test at age <6 months will be counted as not tested).*

	Denominator: 4. **Number Measured** as per Numerator 1. 5. **Total Population** The number of resident children, who were aged >=6 months to < 5 years at the end of the reporting period. *(Child's ages are calculated at the end of reporting period to include those who are less than 5 years of age at any time during the reporting period.)* **Level/unit of counting:** Disaggregated by: **d.** locality **e.** Indigenous status **f.** age **Counting rules:** If a child is measured for anaemia more than once during the reporting period, use the latest value to determine anaemia status. If a child's latest test for anaemia is at age <6 months, discard this value and treat it as 'not tested'.

Validation criteria

Relevance	The measurement of haemoglobin is an indicator of iron (micronutrient) status of children. Significant health status indicator. Reflects service performance.
Sensitivity	Data can show changes over a year that are significant enough to indicate the results and level of current activity or reveal new activity that should be considered.
Policy and program continuity	The GAA program has been operating since 1998. Surveillance will continue and may be expanded to include other health information.
Data quality and availability	The data collection method will depend on a clinic's information system e.g. Communicare, or PCIS, the data required to calculate this performance indicator will be extracted directly from their database.
Sound methodology	Methodology is based on CARPA definitions.

Performance Indicator Validation

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AHKPI 1.7 Chronic Disease Management Plan

Domain: **1. Clinical Services.**

Indicator: **7. Number and proportion of resident clients aged 5 years and over with Type II Diabetes and/or Coronary Heart Disease who have a chronic disease management plan**

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
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 equivalent MBS item numbers for a GPMP. **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 patients 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 equivalent MBS item numbers for a TCA. **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.
Calculation	**Numerator(s):** **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 or equivalent MBS item numbers for a Chronic Disease Management Plan that was initiated within the previous 2 reporting periods. *A current MBS Chronic Disease Management Plan is valid for two years. Therefore, all clients with a current and valid MBS item 721* or equivalent MBS item numbers for a *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 Chronic Disease Management Plan within the reporting period.* **Chronic Disease Management Plan (MBS Item 721 <u>or equivalent MBS item numbers for a</u> – 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 or equivalent MBS item number for a Chronic Disease Management Plan that was initiated within the previous reporting period.

Alternative Chronic Disease Management plan that cannot be claimed (Alternative General Practitioner Management Plan that cannot be claimed – 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 that cannot be claimed (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 **or equivalent MBS item numbers for a** Chronic Disease Management Plan Team Care Arrangement that was initiated within the previous 2 reporting periods.

A current MBS 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 or equivalent MBS item numbers for a Chronic Disease Management Plan Team Care Arrangement that was initiated within the previous reporting period.

Alternative Chronic Disease Management Plan that cannot be claimed (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 that cannot be claimed (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 or equivalent MBS item numbers for a GPMP in the reporting period, only count the latest one. Similarly, count only the latest 723 or equivalent MBS item numbers for a TCA for the reporting period.

Validation Criteria

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".
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	Health services at remote health centres are provided by a number of government and non-government organisations and will be ongoing.
Data quality and availability	The data collection method will depend on a clinic's information system e.g. Communicare, or PCIS, the data required to calculate this performance indicator will be extracted directly from their database.
Sound methodology	Calculation methodology is sound, contingent on Community Health Centres ability to provide total client numbers for each chronic disease.

Performance Indicator Validation

Date last reviewed	March 2021
Review Team	**Representative**
NT AHKPI Clinical Reference Group	
NT AHKPI Technical Working Group	

AHKPI 1.8.1 HbA1c Tests

Domain: **1. Clinical Services.**

Indicator: **8.1. Number and proportion of resident clients aged 5 years and over with Type II Diabetes who have had an HbA1c measurement result recorded**

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.
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.
Calculation	**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. **Counting rules:** **Include:** Type II diabetes only

Validation Criteria

Relevance	Minimum level of best practice service delivery. Able to compare with national data.
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	Health services at remote health centres are provided by a number of government and non-government organisations and will be ongoing.
Data quality and availability	The data collection method will depend on a clinic's information system e.g. Communicare, or PCIS, the data required to calculate this performance indicator will be extracted directly from their database.
Sound methodology	Calculation methodology is sound, contingent on completeness of data entry.

Performance Indicator Validation

Date last reviewed	January 2019
Review Team	**Representative**
NT AHKPI Clinical Reference Group	
NT AHKPI Technical Working Group	

AHKPI 1.8.2 HbA1c Measurements

Domain: **1. Clinical Services.**

Indicator: **8.2 The number and proportion of Aboriginal clients with type II diabetes and whose HbA1c measurements are 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.
Definition	The number and proportion of resident Aboriginal clients greater than or equal to 5 years of age who have type II diabetes and whose HbA1c measurement result recorded within the previous 12 months was within certain levels.
Calculation	**Numerator:** The number of resident aboriginal clients greater than or equal to 5 years of age 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 greater than or equal to 5 years of age who have been diagnosed with type II diabetes and who have had one or more HbA1c tests during the reporting period. **Level/unit of counting** Disaggregated by: 1. locality 2. age group 3. sex **Counting rules** **Include:** Clients with type II diabetes only. Client's ages are calculated according to the end of reporting period. Client's residential statuses are determined according to the end of reporting period.

Validation Criteria

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.
Feasibility	This indicator is feasible as it has already been a Healthy for Life Indicator and is easy to collect.
Sensitivity	This indicator will be sensitive to changes over time as research has demonstrated that relatively small drops in glycosylated haemoglobin (e.g. by 1 point) will lead to a reduced risk of complications. Diabetes control can improve over a 3-6 month period with lifestyle changes and /or adjustment of medications.
Policy and program continuity	Health services at remote health centres are provided by a number of government and non-government organizations and will be ongoing.
Data quality and availability	The data will be available to each health centre through queries in Communicare and PCIS + the Pen Cat audit tool which is now being installed in all ACCHSs.
Sound methodology	Calculation methodology is sound, contingent on accurate data entry**.**

Performance Indicator Validation

Date last reviewed	July 2012
Review Team	**Representative**
AMSANT	Dr Liz Moore, Margaret Cotter, Dr Andrew Bell, Dr Rosalie Schultz
DOHA	Rachel McGahey
DoH	Gary Sinclair
Approval (signature) by Data Sponsor	____ Name, Position

AHKPI 1.9 ACE Inhibitor and/or ARB

Domain: **1. Clinical Services.**

Indicator: **9. Number and proportion of diabetic patients with albuminuria who are on ACE inhibitor and/or ARB**

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
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.
Calculation	**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. **Level/unit of counting:** Disaggregated by: 1. locality, 2. Indigenous status, 3. age group and 4. sex Client's ages are calculated according to the end of reporting period. Client's residential statuses are determined according to the end of reporting period. **Counting rules:** **Include**: type II diabetic patients with ACR > 3.4 **Exclude**: **a.** type 1 diabetes, **b.** gestational diabetes mellitus, **c.** previous gestational diabetes mellitus, **d.** impaired fasting glucose; or impaired glucose tolerance

Validation Criteria

Relevance	Good evidence for improved health outcomes. 70% dialysis due to diabetes.
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	Health services at remote health centres are provided by a number of government and non-government organisations and will be ongoing.
Data quality and availability	The data collection method will depend on a clinic's information system e.g. Communicare, or PCIS, the data required to calculate this performance indicator will be extracted directly from their database.
Sound methodology	Calculation methodology is sound, contingent on completeness of data entry.

Performance Indicator Validation

Date last reviewed	September 2010
Review Team	**Representative**
NT AHKPI Clinical Reference Group	Dr Andrew Bell (Katherine West Health Services and AMSANT) Hilary Bloomfield (Danila Dilba Health Service and AMSANT) Dr Wendy Page (Miwatj Health Service and AMSANT) Dr Alex Hope (Santa Theresa Health Service and AMSANT) Dr Liz Moore, Melissa Roberts, Kerry Copley (AMSANT) Brycen Brook, Janet Rigby, Andrew MacAuliffe, Dr Hugh Heggie, Sharon Noor (DHF) Aumea Herman (OATSIH)
NT AHKPI Technical Working Group	Carey Lonsdale, Rachel McGahey (OATSIH) Richard Inglis, Olivia Toune, Dr Jo Wright, Anne Farrawell (DHF) Greg Henschke, Melissa Roberts, Kerry Copley (AMSANT) Lyall Burrows (Central Australian Aboriginal Congress and AMSANT)

AHKPI 1.10 Health Check

Domain: **1. Clinical Services.**

Indicator: **10. Number and proportion of Indigenous resident clients who have had a full health check**

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. Health checks indicate quality of primary health care services, with a focus on health promotion and prevention.
Definition	The number resident clients who have a current complete: 1. MBS item 715 or equivalent MBS item numbers for an Indigenous health check, during the reporting period. **or** 2. Alternative Indigenous health check that cannot be claimed, 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 patients 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 advise 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 patients 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.

Calculation

Numerator:

MBS Item 715 or equivalent MBS item numbers for an Indigenous Health Check

	The number of resident Indigenous clients who have a current and complete MBS Item 715 or equivalent MBS item numbers for an Indigenous health check, during the reporting period. **Numerator:** **Alternative Indigenous Health Check** that cannot be claimed, similar to MBS Item 715, during the reporting period. 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:** Number of resident Indigenous clients as at the end of the reporting period. **Level/unit of counting:** Disaggregated by : 1. locality, 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. sex. Client's ages are calculated according to the end of reporting period. Client's residential statuses are determined according to the end of reporting period. **Counting rules** Each client to be counted once only.

Validation Criteria

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.
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	Health checks have been recommended for many years. The current definition for reporting purposes is not expected to change.

Data quality and availability	The data collection method will depend on a clinic's information system e.g. Communicare, or PCIS, the data required to calculate this performance indicator will be extracted directly from their database.
Sound methodology	Calculation methodology is sound, contingent on Community Health Centres ability to provide residential client numbers. Definition is aligned to the '*SCARF Technical specifications for Essential Indicators Version 4.0 July 2010*' that is being developed as a national standard.

Performance Indicator Validation

Date last reviewed	March 2021
Review Team	**Representative**
NT AHKPI Clinical Reference Group	
NT AHKPI Technical Working Group	

AHKPI 1.12 Cervical Screening

Domain: **1. Health Services.**

Indicator: **12. Number and proportion of resident women who have had at least one cervical screen during 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;*
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.
Calculation	**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 5 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 6 reporting periods. **Denominator:** The number of resident women aged 25-74 years of age. **Level/unit of counting:** Disaggregated by: 1. Indigenous status 2. Age group 3. locality Client's ages are calculated according to the end of reporting period. Client's residential statuses are determined according to the end of reporting period. **Counting rules—inclusions, exclusions:** If a client has more than one cervical screening test, self-collected sample or colposcopy test during a reporting period, just count the latest one. Each client to be counted only once.

Validation Criteria

Relevance	This indicator measures the effectiveness of women's health programs for cervical cancer screening.
Sensitivity	The indicator would be sensitive to trend changes over time.

Policy and program continuity	Cervical screening changed in December 2017 from 2 yearly Pap tests for women aged 20-69 years, to 5 yearly cervical screening tests for women aged 25-74 years.
Data quality and availability	The data collection method will depend on a health centre's information system e.g. Communicare or PCIS. The data required to calculate this performance indicator will be extracted directly from their database. Because of the changes to the National Cervical Screening Program, data may be more difficult to interpret.
Sound methodology	Calculation methodology is sound, contingent on completeness of data entry.

Performance Indicator Validation

Date last reviewed	September 2020
Review Team	**Representative**
NT AHKPI Clinical Reference Group	Dr Liz Moore, Margaret Cotter, Louise Patel, Kerry Copley (AMSANT) Dr Wendy Page (Miwatj and AMSANT)
NT AHKPI Technical Working Group	Margaret Cotter, Kerry Copley (AMSANT) Deb Gent (Central Australian Aboriginal Congress and AMSANT) Peta Archer, Seetha Devi (DCDD) Maryanne Lewis (Sunrise HS and AMSANT) Jaspreet Singh, Victor Teale (Miwatj and AMSANT) Rachel Meyer (IHD)
Approval (signature) by Data Sponsor	____ (DoH, Chair AHKPI Steering Committee)

AHKPI 1.13 Blood Pressure Control

Domain: **1. Clinical Services.**

Indicator: **13. Number and proportion of Indigenous clients who have diabetes type 2 and who have good BP control within 6 month period.**

Rationale	Good control of BP in people with diabetes reduces the incidence of cardiovascular disease and delays the progression of renal disease.
Definition	Number and proportion of Aboriginal clients aged 15 and over who have type 2 diabetes and who have good BP control.
Calculation	The calculation includes blood pressures measurement ratio and coverage ratio: **a.** Blood Pressure Ratio: blood pressure measured less than or equal to 130/80mmgh / clients with blood pressure measured with Type II diabetes **b.** Coverage Ratio: clients with blood pressure measured with Type II diabetes /clients with Type II diabetes **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 number 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.* **Level/unit of counting:** Disaggregated by: **a.** locality, **b.** Indigenous status, **c.** age group, **d.** sex. Client's ages are calculated according to the end of reporting period. Client's residential statuses are determined according to the end of reporting period. **Counting rules:** **Include:** Type II diabetes only **Exclude:** **1.** Type 1 diabetes, **2.** gestational diabetes mellitus **3.** previous gestational diabetes mellitus **4.** impaired fasting glucose **5.** impaired glucose tolerance

Validation Criteria

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.
Feasibility	This indicator is feasible as BP should be recorded at least six monthly on all patients with diabetes
Sensitivity	This indicator will be sensitive to changes over time as BP should be recorded at most visits.
Policy and program continuity	Health services at remote health centres are provided by a number of government and non-government organizations and will be ongoing.
Data quality and availability	The data will be available to each health centre through queries in Communicare and PCIS + the Pen Cat audit tool which is now being installed in all ACCHSs.
Sound methodology	Calculation methodology is sound, contingent on accurate data entry.

Performance Indicator Validation

Date last reviewed	dd Mmmm yyyy
Review Team	**Representative**
AMSANT	Name, Position
DOHA	Name, Position
DHF	Name, Position
Approval (signature) by Data Sponsor	____ Name, Position

AHKPI 1.14 Chronic Kidney Disease

Domain: **1. Clinical Services.**

Indicator: **Proportion of regular clients aged 31 and over at risk from Chronic 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
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.
Calculation	The calculation includes ratio of those at risk of renal disease out of those screened and screening coverage ratio: **a.** Risk Ratio: Number at risk / number screened **b.** Screening Ratio: number screened / total population eligible for screening **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^2 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^2 and less than 60 mL/min/1.73m^2 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^2 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^2 and less than 60 mL/min/1.73m^2 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^2 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^2 and less than 45 mL/min/1.73m^2 AND ACR less than or equal to 300 mg/mmol; OR eGFR greater than or equal to 45 mL/min/1.73m^2 and less than 60 mL/min/1.73m^2 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^2 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^2 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. **Level/unit of counting** Disaggregated by: **a.** Locality **b.** Sex **c.** Age group a. 31-45 b. 45-64 c. 65 and over **Counting rules** Client's ages are calculated according to the end of reporting period Client's residential statuses are determined according to the end of reporting period.

Validation Criteria

Relevance	Early detection and appropriate treatment of renal disease including tight blood pressure control has been shown to significantly delay the onset of end stage renal disease. Understanding the burden of renal disease will assist with service planning. Screening from age 30 requires both an ACR and a eGFR whereas urinalysis and eGFR is required before the age of 30 with an ACR if there is more than 1+ protein. Therefore, the indicator starts ate the age of 31 allowing a year for an ACR to be performed.
Feasibility	This indicator is feasible as it aligns with CARPA guidelines and renal disease is common in the NT
Sensitivity	This indicator will be sensitive to changes over time as renal screening is reasonably simple and can be undertaken as part of a health check or opportunistically
Policy and program continuity	Health services at remote health centres are provided by a number of government and non-government organizations and will be ongoing.
Data quality and availability	The data will be available to each health centre through queries in Communicare and PCIS the Pen Cat audit tool which is now being installed in all ACCHSs.
Sound methodology	Calculation methodology is sound contingent on accurate data entry.

Performance Indicator Validation

Date last reviewed	dd Mmmm yyyy
Review Team	**Representative**
AMSANT	Name, Position
DOHA	Name, Position
DHF	Name, Position
Approval (signature) by Data Sponsor	____ Name, Position

AHKPI 1.15 Rheumatic Heart Disease

Domain: **1. Clinical Services.**

Indicator: **15. Number and proportion of Indigenous ARF / RHD clients who are prescribed to be requiring 2-4 weekly BPG Penicillin Prophylaxis and have received injections over a 12 month period.**

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)*
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).
Calculation	**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. **Level/unit of counting:** Disaggregated by: **1.** age group **2.** sex **3.** locality **Counting rules:** Clients who require 2 or 3 weekly injections will be included in the numerator and denominator but for the purpose of this indicator, the number of injections required will be 13 per year for all ARF/RHD clients. Client with an ARF/RHD diagnosis date prior or equal to the report period start date are to be calculated against a 12 month period. Clients with an ARF/RHD diagnosis date after the report period start date are to be calculated as requiring injections based on number of completed months between the diagnosis date and the report period end date. Number of injections is calculated according to the specified BPG penicillin master chart periods. Percentages of injections are to be calculated as rounded down to a whole number. Residential status is determined according to the end of the reporting period.

Validation Criteria

Relevance	Reduces the recurrences of ARF and therefore prevents RHD. Reflects best practice according to National Guidelines. Reflects health service systems.
Feasibility	Collection and analysis of this data is currently collected routinely, therefore not requiring any additional costs.
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	The program will continue to be operated as at present.
Data quality and availability	The data collection method will depend on a clinic's information system e.g. Communicare, or PCIS, the data required to calculate this performance indicator will be extracted directly from their database. The data will also be available to each health service from the NT RHD Register.
Sound methodology	Calculation methodology is sound, contingent on completeness of data entry.

Performance Indicator Validation

Date last reviewed	December 2015
Review Team	**Representative**
AMSANT	Name, Position
DOHA	Name, Position
DoH	Name, Position
Approval (signature) by Data Sponsor	____ Name, Position

AHKPI 1.16 Tobacco Use

Domain: **1. Clinical Services.**

Indicator: **16. Number and proportion of current resident Aboriginal clients aged 15 and over whose smoking status has been recorded.**

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.
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 within the previous 2 reporting periods.
Calculation	The calculation includes both coverage ratio and smoking status ratio: **1.** Smoking Status Recorded Coverage ratio: Number smoking status recorded / Total resident population. **2.** Smoking status Recorded by Smoking Status ratio: Number of Smoking status by type / Total number smoking status recorded. **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. **Level/unit of counting** Disaggregated by: a. Locality b. Age group - 15-24 years - 25-44 years - 45 -64 years - 65+ years c. Sex **Counting rules:** Client's ages are calculated according to the end of reporting period. Client's residential statuses are determined according to the end of reporting period.

Validation Criteria

Relevance	Tobacco use is the single most important modifiable chronic disease risk factor. This indicator aligns to national Aboriginal primary health care indicator.
Feasibility	This indicator is feasible as smoking history should be collected on all adults.
Sensitivity	This indicator will be sensitive to changes over time as long as clinicians change smoking status consistently. This does require smoking status to be checked every two years even in long established non-smokers. However, this should be done regularly.
Policy and program continuity	Health services at remote health centres are provided by a number of government and non-government organizations and will be ongoing.
Data quality and availability	The data will be available to each health centre through queries in Communicare and PCIS + the Pen Cat audit tool which is now being installed in all ACCHSs.
Sound methodology	Calculation methodology is sound contingent on accurate data entry**.**

Performance Indicator Validation

Date last reviewed	September 2015
Review Team	**Representative**
AMSANT	Name, Position
DOHA	Name, Position
DHF	Name, Position
Approval (signature) by Data Sponsor	____________________________________ Name, Position

AHKPI 1.17 Sexually Transmissible Infection

Domain: **1. Clinical Services.**

Indicator: **Number and proportion of resident clients aged 15-34 who have had a test for sexually transmitted infections (STIs).**

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. Guidelines recommend a full STI check, including syphilis and HIV testing, annually as a minimum requirement. Monitoring the proportion of clients 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.
Definition	Number and proportion of resident 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 a STI during the reporting period.
Calculation	**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. **Level/unit of counting:** Disaggregated by: **1.** Locality **2.** Indigenous status **3.** Age group • 15-19 years • 20-24 years • 25-29 years • 30-34 years **4.** Sex Client's ages are calculated according to the beginning of reporting period. Client's residential statuses are determined according to the end of reporting period.

Validation Criteria

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 is more accurately estimated. This information is useful for planning and reviewing sexual health policy.
Feasibility	The data required for this PI is currently available within PCIS and Communicare.
Sensitivity	The data would be sensitive to trend changes over time. It will enable an assessment of current level of activity and identify where action is required; over time it will show results from that action.
Policy and program continuity	Sexual health programs across the NT are provided by government and non-government services and will be ongoing. Although unlikely, if changes to the guidelines for STI testing occurred, it would be possible to change the collection of data and subsequent reports.
Data quality and availability	The data collection method will depend on a clinic's information system e.g. paper based, Communicare or PCIS. For most NT remote primary health care centres the data will be available through PCIS and Communicare.
Sound methodology	Calculation methodology is sound, contingent on completeness of data entry and Community Health Centres ability to provide total client numbers for clients aged 15-34 years.

Performance Indicator Validation

Date last reviewed	April 2016
Review Team	**Representative**
AMSANT	Name, Position
DOHA	Name, Position
DHF	Name, Position
Approval (signature) by Data Sponsor	____ Name, Position

AHKPI 1.18 Cardiovascular Risk Assessment

Domain: **1. Clinical Services**

Indicator: **Number and proportion of Indigenous residents aged 20 years and over who have had a cardiovascular risk assessment.**

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.
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: a) Low risk (<10%) b) Moderate risk (10-15%) c) High risk (>15%)
Calculation	**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. **Level/unit of counting:** Disaggregated by: **1.** Locality **2.** Age group • 20-34 years • 35-54 years • 55-74 years • 75 years and over **3.** Sex **Counting rules:** If a client has more than one assessment, count only latest assessment. Client's ages are calculated according to the end of the reporting period. Residential status is determined according to the end of the reporting period.

Validation Criteria

Relevance	Reflects capacity of health service to provide preventive care. Significant health status indicator. Reflects service performance.
Feasibility	This indicator is feasible as the data is currently or will be by end of 2015, collected by primary health care centres
Sensitivity	Data can show changes over years that are significant enough to indicate the results and level of current activity or reveal new activity that should be considered.
Policy and program continuity	CVD risk assessment has been recommended by CARPA STM protocol. CARPA STM recommendations for absolute cardiovascular risk assessment differ from the national recommendations in that CARPA STM adds 5% risk for Indigenous status, and that it is should be used for people from the age of 20 years (versus from age 35 years for national guidelines). This is because of the high incidence of premature CVD in the NT Indigenous population. It is possible that in the future that either or both the CARPA STM and the national recommendations may change the definition of absolute CV risk assessment. The use of this assessment and this KPI may assist in providing evidence for the CARPA STM recommendations or an alteration of them.
Data quality and availability	The data collection method will depend on a clinic's information system e.g. Communicare, or PCIS, the data required to calculate this performance indicator will be extracted directly from their database. A CV risk calculator will be available by the end of 2015 at the latest. However, the calculator in Communicare is currently based on nKPI definitions of recency of tests being recorded in the last 2 years.
Sound methodology	Methodology is based on CARPA STM definitions.

Performance Indicator Validation

Date last reviewed	September 2015
Review Team	**Representative**
AMSANT	Name, Position
DOHA	Name, Position
DHF	Name, Position
Approval (signature) by Data Sponsor	__________________________________ Name, Position

AHKPI 1.19 Diabetic Retinopathy

Domain:	**1. Clinical Services**
Indicator:	**Number and proportion of Indigenous residents with diabetes who have had retinal screening.**

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.
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.
Calculation	**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. **Level/unit of counting:** Disaggregated by: **1.** locality **2.** Indigenous status **3.** Age group • 0-14 years • 15-24 years • 25-44 years • 45-64 years • 65 years and over **4.** Sex **Counting rules:** A retinal exam requires fundoscopy through a dilated pupil with the examining clinician being suitably trained to screen for diabetic retinopathy. Retinal camera imaging with the image being reviewed by a trained clinician (including optometrist or ophthalmologist) is also included as a retinal eye examination The pupil may not have to be dilated for a retinal camera photo. Client’s ages are calculated according to the end of the reporting period. Residential status is determined according to the end of the reporting period. Calculated separately for 12 months and 24 months.

Validation Criteria

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.
Feasibility	This is feasible because the information should be included in Clinical Information Management Systems. Data will be lacking if visiting optometrist or resident PHC staff do not enter retinal examination as a clinical item.. However the indicator should prompt efforts to record retinal eye examinations as a clinical item
Sensitivity	This should be sensitive to changes over time as long as eye exams are recorded and correctly. It may be affected by the regularity of outreach optometry visits.
Policy and program continuity	The guidelines on retinal screening for Aboriginal people with diabetes are well established. Retinal examination are largely done by visiting optometrists although trained PHC staff can also undertake this screening or use a retinal camera to allow review of images by qualified staff in a central location.
Data quality and availability	Visiting optometrists do not always record eye exams in either PCIS or Communicare, However, this indicator should prompt either visiting optometrists or resident clinicians to enter eye exams into the Clinical Information Management Systems as a clinical
Sound methodology	Calculation methodology is sound contingent on accurate data entry.

Performance Indicator Validation

Date last reviewed	September 2015
Review Team	**Representative**
AMSANT	Name, Position
DOHA	Name, Position
DHF	Name, Position
Approval (signature) by Data Sponsor	____ Name, Position

AHKPI 1.20 Ear Disease in Children

Domain: **1. Clinical Services**

Indicator: **Number and proportion of Aboriginal children aged between 3 months and less than 6 years of age who have had an ear examination.**

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.
Definition	Number and proportion of Aboriginal clients aged from 3 months to less than 6years at the end of reporting period who have had an otoscopy ear examination during the reporting period and the proportion of children examined who have ear discharge.
Calculation	The calculation includes both coverage ratio and ear discharge ratio: **1.** Ear Discharge Raito: Number with Ear Discharge / Number Measured **2.** Coverage ratio: Number Measured / Total Population **Numerator** **a.** The number of resident Aboriginal clients aged greater than or equal to 3 months to less than 6 years at the end of reporting period who have had ear examination (otoscopy) **and** whose status is recorded as having ear discharge at **any** examination during the reporting period. **b.** The number of resident Aboriginal clients aged greater than or equal to 3 months to less than 6 years at the end of reporting period who have had ear examination (otoscopy) **and** whose status is recorded as having ear discharge at **last** examination during the reporting period. **c.** The number of resident Aboriginal clients aged greater than or equal to 3 months to less than 6 years at the end of reporting period who have had ear examination (otoscopy) during the reporting period. (*Child's ages are calculated according to the date for ear examination)* **Denominator** **c.** The number of resident Aboriginal clients aged greater than or equal to 3 months to less than 6 years at the end of reporting period who have had an ear examination (otoscopy) during the reporting period. **d.** The number of resident Aboriginal clients greater than or equal to 3 months to less than 6 years of age at the end of the reporting period (*Child's ages are calculated according to the end of reporting period)* **Level/unit of counting** Disaggregated by: 1. Locality 2. Age group • 3-5 months • 6-11 months • 12-35 months • 36-72 months 3. Sex **Counting rules** Each individual should be counted against each numerator once only Client's residential statuses are determined according to the end of reporting period.

	Client’s ages for disaggregation are calculated according to the end of the reporting period.

Validation Criteria

Relevance	Ear disease is very prevalent in Aboriginal children in the NT and causes significant disability.
Feasibility	This indicator is feasible as Aboriginal children should be examined regularly for ear disease.
Sensitivity	This indicator will be sensitive to changes over time as long as clinicians examine ears regularly. The indicator should be reasonably sensitive as the clinician is only required to note discharge – and does not need to diagnose the ear disease correctly. This is important given the high staff turnover in remote PHC.
Policy and program continuity	Ear health and audiology services at remote health centres are provided by the NTG Department of Health
Data quality and availability	The data will be available to each health centre through queries in Communicare and PCIS
Sound methodology	Calculation methodology is sound contingent on accurate data entry.

Performance Indicator Validation

Date last reviewed	April 2016
Review Team	**Representative**
AMSANT	Name, Position
DOHA	Name, Position
DHF	Name, Position
Approval (signature) by Data Sponsor	____ Name, Position

AHKPI 2.1 Unplanned Staff Turnover

Domain: **2.Corporate Service and Infrastructure.**

Indicator: **13. Report on unplanned staff turnover (where possible by occupation) over each 12 month period.**

Rationale	High staff turnover can have a negative impact on programs as well as bring in fresh ideas and perspectives. A high level of turnover creates particular problems with continuity, corporate memory and the sort of incremental change over an appropriate timeframe required in chronic disease management. Informal communication networks are vulnerable to staff turnover. Productivity is lost when skilled staff leave and replacements need to be inducted and trained.
Definition	Provide qualitative report on unplanned staff turnover. Unplanned staff turnover is those staff who “didn’t complete contract” (resigned OR sacked). The report should include: **1.** The level of unplanned staff turnover for all staff and if possible by occupation. **2.** The total number of staff, if possible by occupation.
Calculation	Not applicable.

Validation Criteria

Relevance	Reflects management support systems, staff packages Impacts significantly on service delivery
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	There are no expected changes to policy that will affect reporting of the PI.
Data quality, feasibility and availability	The information for this report will be sourced from the Community Health Clinic HR records.
Sound methodology	Not applicable

Performance Indicator Validation

Date last reviewed	13 August 2007
Review Team	**Representative**
NT KPI Technical Working Group	Elaine Topping (DOHA) Cate Kildea (OATSIH) Greg Henscke and Simon Stafford (AMSANT) John Boffa (Central Australian Aboriginal Congress and AHF) Bev Sibthorpe (Menzies School of Health Research and SCARF) Andrew Bell (KWHB) Amanda Hand (Wurli Wurlinjang Health Service) Sally Matthews, Christine Connors, Noelene Swanson, Jan Tucker and Richard Inglis (DHF)

AHKPI 2.2 Recruits completing orientation training

Domain: **2.Corporate Service and Infrastructure.**

Indicator: **14. Report on recruits (excluding locums) completing an orientation and induction program, including cultural awareness**

Rationale	A good induction program benefits both the organisation and the new employee and can help to reduce recruitment costs as staff are more likely to give longer term commitment to the organisation. Cultural awareness training enables staff to understand issues that are specific to Indigenous people and increases the organisation's effectiveness in recruiting Indigenous people.
Definition	Provide a qualitative report on processes in place to ensure recruits complete an orientation and induction program over past 12 months. The scope of an organisation's orientation and induction programs could be classified as: **1.** Introduction into policy and protocols **2.** Introduction into workplace **3.** Introduction into cultural awareness. Cultural awareness can be specified as either "community culture" versus "aboriginal culture". **4.** Introduction into occupational health and safety Include all recruits who are hired for longer than one month. Specify the number and proportion of new staff who involve into each aspect mentioned above over past 12 months.
Calculation	Not applicable

Validation Criteria

Relevance	Reflects management commitment to providing a culturally appropriate health service that meets the needs of their clients. May also impact on staff retention rates.
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	There are no expected changes to policy that will affect reporting of the PI.
Data quality, feasibility and availability	The information for this report will be sourced from the Community Health Clinic Education and Training records.
Sound methodology	Not applicable

Performance Indicator Validation

Date last reviewed	13 August 2007
Review Team	**Representative**
NT KPI Technical Working Group	Elaine Topping (DOHA) Cate Kildea (OATSIH) Greg Henscke and Simon Stafford (AMSANT) John Boffa (Central Australian Aboriginal Congress and AHF) Bev Sibthorpe (Menzies School of Health Research and SCARF) Andrew Bell (KWHB) Amanda Hand (Wurli Wurlinjang Health Service) Sally Matthews, Christine Connors, Noelene Swanson, Jan Tucker and Richard Inglis (DHF)

AHKPI 2.3 Overtime Workload

Domain: **2.Corporate Service and Infrastructure.**

Indicator: **15. Report on overtime workload**

Rationale	Overtime is unavoidable in a service which must always be on-call, irrespective of often widely fluctuating demand. Overtime in excess of projected needs increases operating costs. Costs associated with overtime as compared to the employment of extra resources. Excessive overtime has implications for occupational health and safety. Potential to reduce overtime by better matching of resources to identified demands.
Definition	Provide a report about clinic overtime workload over past 12 months, including the number and proportion of after hour episode of health care outside of standard opening hours and comments
Calculation	**Numerator:** The number of after hour episode of health care outside of standard opening hours. **Denominator:** The total number of episodes of health care.

Validation Criteria

Relevance	Expenditure on overtime reduces the capacity for staffing of the normal hour’s health service and impacts on the ability to provide programs.
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	There are no expected changes to policy that will affect reporting of the PI.
Data quality, feasibility and availability	The information for this report will be sourced from clinic information systems including Communicare, Ferret, PCIS and KPI Interim Data Collection Tool.
Sound methodology	Not applicable

Performance Indicator Validation

Date last reviewed	13 August 2007
Review Team	**Representative**
NT KPI Technical Working Group	Elaine Topping (DOHA) Cate Kildea (OATSIH) Greg Henscke and Simon Stafford (AMSANT) John Boffa (Central Australian Aboriginal Congress and AHF) Bev Sibthorpe (Menzies School of Health Research and SCARF) Andrew Bell (KWHB) Amanda Hand (Wurli Wurlinjang Health Service) Sally Matthews, Christine Connors, Noelene Swanson, Jan Tucker and Richard Inglis (DHF)

AHKPI 2.4 Quality Improvement

Domain: **2.Corporate Service and Infrastructure.**

Indicator: **16. Report on quality improvement systems including the use of best practice guidelines e.g. CARPA.**

Rationale	Provides information on steps taken to identify strengths and opportunities for improvement which can be addressed through operational planning.
Definition	Provide a qualitative annual report on quality assurance processes including development of procedures manual and systems for audit and review of health services.
Calculation	Descriptive reports – Health Board/AMS decides what to include and how much detail is to be reported.

Validation Criteria

Relevance	Reflects management commitment to best practice systems: guidelines, recall systems, clinical audit & feedback. Reflects capacity of service to identify & monitor effective performance.
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	There are no expected changes to policy that will affect reporting of the PI.
Data quality, feasibility and availability	Not applicable
Sound methodology	Not applicable

Performance Indicator Validation

Date last reviewed	13 August 2007
Review Team	**Representative**
NT KPI Technical Working Group	Elaine Topping (DOHA) Cate Kildea (OATSIH) Greg Henscke and Simon Stafford (AMSANT) John Boffa (Central Australian Aboriginal Congress and AHF) Bev Sibthorpe (Menzies School of Health Research and SCARF) Andrew Bell (KWHB) Amanda Hand (Wurli Wurlinjang Health Service) Sally Matthews, Christine Connors, Noelene Swanson, Jan Tucker and Richard Inglis (DHF)

AHKPI 3.1 Report on service activities

Domain: **3. Advocacy, Knowledge and Research, Policy and Planning..**

Indicator: **17. Report on service activities (position papers, collaborative meetings and services, published papers, policy submissions, participative research).**

Rationale	Measures involvement in policy revision and development and health program planning and evaluation. Stronger linkages between service providers may lead to improved quality of care and enhanced programme effectiveness and efficiency. Identification of opportunities to participate in research to produce relevant information for policy-making purposes. Identification of communication barriers.
Definition	Provide a qualitative report on the following activities on an annual basis: **1.** Published papers, including position papers **2.** Collaborative meetings and services **3.** Policy submissions **4.** Participation in research projects **5.** Community meetings and consultation
Calculation	Not applicable. Descriptive reports – Health Board/AMS decides what to include and how much detail is to be reported.

Validation Criteria

Relevance	Reflects the involvement of the organisation in regional issues and policy formulation.
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	There are no expected changes to policy that will affect reporting of the PI.
Data quality, feasibility and availability	Not applicable
Sound methodology	Not applicable

Performance Indicator Validation

Date last reviewed	13 August 2007
Review Team	**Representative**
NT KPI Technical Working Group	Elaine Topping (DOHA) Cate Kildea (OATSIH) Greg Henscke and Simon Stafford (AMSANT) John Boffa (Central Australian Aboriginal Congress and AHF) Bev Sibthorpe (Menzies School of Health Research and SCARF) Andrew Bell (KWHB) Amanda Hand (Wurli Wurlinjang Health Service) Sally Matthews, Christine Connors, Noelene Swanson, Jan Tucker and Richard Inglis (DHF)

AHKPI 4.1 Community involvement in determining health priorities

Domain: **4. Community Engagement, Control and Cultural Safety.**

Indicator: **18. Report on community involvement in determining health priorities and strategic directions through any of the following: health boards; steering committees; advisory committees; community councils; health councils.**

Rationale	Community participation in determining health priorities and strategic directions enables a health service to be more responsive to community views and preferences and hence more accountable to the community it serves. It creates opportunities for healthy debate and two-way communication between the health service and the community.
Definition	Provide a qualitative annual report on strategies and practices for community involvement in health planning. “Community” encompasses members of the public with an interest in health and well-being and service users such as patients, carers and family members. “Community involvement” is the process of involving members of the public including service users in decision-making about health service planning, delivery and quality and safety improvement.
Calculation	Not applicable. Descriptive reports – Health Board/AMS decides what to include and how much detail is to be reported.

Validation Criteria

Relevance	Reflects the commitment of the organisation to community participation in service planning and decision making.
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	There are no expected changes to policy that will affect reporting of the PI.
Data quality, feasibility and availability	Not applicable
Sound methodology	Not applicable

Performance Indicator Validation

Date last reviewed	13 August 2007
Review Team	**Representative**
NT KPI Technical Working Group	Elaine Topping (DOHA) Cate Kildea (OATSIH) Greg Henscke and Simon Stafford (AMSANT) John Boffa (Central Australian Aboriginal Congress and AHF) Bev Sibthorpe (Menzies School of Health Research and SCARF) Andrew Bell (KWHB) Amanda Hand (Wurli Wurlinjang Health Service) Sally Matthews, Christine Connors, Noelene Swanson, Jan Tucker and Richard Inglis (DHF)

AHKPI 4.2 Evidence of appropriate reporting to community

Domain: **4. Community Engagement, Control and Cultural Safety.**

Indicator: **19. Show evidence of appropriate reporting to community on progress against core PIs.**

Rationale	Appropriate reporting to communities on health service progress against core performance indicators has the potential to: **1.** promote stronger governance within the health service **2.** provide better accountability to the community **3.** improve community understanding of health systems **4.** enhance consumer influence within health systems **5.** promote service quality improvement. Health outcomes of the health care system should be evaluated and providers should be accountable to the community, in terms of both cost and quality for the outcomes achieved.
Definition	Provide qualitative annual report on evidence of information sharing with communities on progress against core health performance indicators during a calendar year. Describe, if applicable, the strategies that have been developed to enable reporting to groups or individuals that are difficult to reach.
Calculation	Not applicable. Descriptive reports – Health Board/AMS decides what to include and how much detail is to be reported.

Validation Criteria

Relevance	Critical feedback loop for improving health outcomes. Promotes health services to consider effective feedback mechanisms
Sensitivity	The indicator would be sensitive to trend changes over time.
Policy and program continuity	There are no expected changes to policy that will affect reporting of the PI.
Data quality, feasibility and availability	Not applicable
Sound methodology	Not applicable

Performance Indicator Validation

Date last reviewed	13 August 2007
Review Team	Representative
NT KPI Technical Working Group	Elaine Topping (DOHA) Cate Kildea (OATSIH) Greg Henscke and Simon Stafford (AMSANT) John Boffa (Central Australian Aboriginal Congress and AHF) Bev Sibthorpe (Menzies School of Health Research and SCARF) Andrew Bell (KWHB) Amanda Hand (Wurli Wurlinjang Health Service) Sally Matthews, Christine Connors, Noelene Swanson, Jan Tucker and Richard Inglis (DHF)