



# New National Key Performance Indicator (nKPI) for primary health care – sexually transmissible infections

## Consultation paper

### Introduction

The Clinical and Technical Working Group for the Aboriginal and Torres Strait Islander Health Services Data Advisory Group (HS DAG) met on the 23 April and the 4 May 2021 to consider the feasibility of a new nKPI for sexually transmissible infections (STIs), and to make recommendations regarding the definition and specifications of the new nKPI.

The Working Group considered applicable clinical considerations as well as the technical feasibility of implementing the indicator.

A number of options were considered by the Working Group and these are outlined in the *New nKPI Briefing Paper – sexually transmissible infections (Attachment A)*. The options relate to the following broad considerations:

1. Scope of disease to include in the indicator (chlamydia / gonorrhoea)
2. Age range to include in the indicator
3. Measure screening for STIs via tests requested or test results
4. Terminology definition for tests included in the indicator

### Working Group Recommendations

The Working Group recommended that an STI indicator be developed and piloted with selected health services for the first 2 reporting rounds.

Recommendations for consideration by the Working Group regarding the specifics of the indicator are outlined in the *New nKPI Briefing Paper – sexually transmissible infections*. The Working Group made the following final recommendations:

1. Options 1a and 1b – include chlamydia and gonorrhoea
2. Option 2 - Include age range 15-35 years
3. Option 3b - Include only test results
4. Option 4b - produce bespoke comprehensive definitions for test inclusion
5. Ensure gender permissible values match the existing nKPI specifications (*1 Male, 2 Female, 3 Other, 9 Not stated/inadequately described*)
6. Note limitations of the data, including:
  - lack of consistency of nomenclature in pathology test results
  - risks of over or under-reporting, including that tests conducted in sexual health clinics may not be copied to clients primary health service
  - inability to determine the sexually active cohort.

## Attachments

- A.** New nKPI Briefing Paper – sexually transmissible infections
- B.** New indicator template – sexually transmissible infections

## NEW nKPI – sexually transmissible infections (Attachment A)

Proposed nKPI:

Proportion of Indigenous regular clients who were tested for one or more sexually transmissible infections

---

Aboriginal and Torres Strait Islander people are at higher risk of contracting sexually transmitted infections (STIs) and blood-borne viruses (BBVs), particularly if living in remote and very remote communities.

Best Practice Guidelines recommend annual screening for chlamydia and gonorrhoea for sexually active Indigenous Australians, with those at higher risk to also be screened for syphilis and HIV.

An increase in the number of people tested annually for STIs will identify asymptomatic infections. Early detection, if the STI is treated, will reduce the time a person is infectious and therefore assist in reducing transmission rates. It will also reduce the likelihood of complications or adverse outcomes to the individual.

*Source: Draft METeOR specification - national Key Performance Indicators (nKPIs) for Indigenous-specific primary health care: proposed specifications for STI indicator*

### 1. Rationale

There are widely varying prevalence rates for sexually transmitted infections (STIs) and blood-borne viruses (BBVs) within Aboriginal and Torres Strait Islander populations, reflecting different transmission risks from lack of condom use, use of needle exchange programs, multiple sexual partners, understanding of safe sex, cultural values and poorer access to healthcare. The majority of STI notifications (80%) for both the general population and Aboriginal and Torres Strait Islander peoples are in the age group 15–29 years. STIs and BBVs are often asymptomatic. Diagnosis and management are dependent on accurate risk assessment, screening and education. The majority of STIs in Australia are diagnosed in primary care rather than in specialist sexual health clinics (Source: The National Guide Evidence Base).

The National incidence of selected STIs and BBVs, per 100,000 population:

	Aboriginal and Torres Strait Islander notifications/100,000 population
Chlamydia	1,325
Gonorrhoea	626
Syphilis	61
Human immunodeficiency virus (HIV)	6.8
New case hepatitis C	167
New case hepatitis B	66

(Source: The National Guide Evidence Base).

## Chlamydia

Chlamydia trachomatis is the most commonly diagnosed STI. Notification rates in Australia in the general population have plateaued since 2011 after rising for the 15 years prior. However, in 2015 the chlamydia notification rate in major cities for Aboriginal and Torres Strait Islander peoples was twice as high as among non-Indigenous people, increasing to eight times higher in remote areas. Asymptomatic infection is common in both sexes; for example, an estimated 85% of chlamydia infection does not present symptomatically.

Asymptomatic males are at higher risk of developing urethritis, epididymitis and a reactive arthritis (Reiter's syndrome) as a result of chlamydia infection. In women, chlamydia can cause cervicitis with the risk of developing salpingitis and pelvic inflammatory disease, ectopic pregnancy, infertility and chronic pelvic pain. Chlamydia infection in adults is easily tested for with a first void urine sample or high vaginal swab (often performed by the client herself).

## Gonorrhoea

Gonorrhoea is diagnosed ten times more commonly in Aboriginal and Torres Strait Islander peoples than in non-Indigenous people. The incidence increases with remoteness, and with those belonging to higher risk groups such as sex workers and men who have sex with men. Gonorrhoea is largely asymptomatic in women but approximately 90% of men may suffer symptomatic urethritis, proctitis, epididymitis and, rarely, prostatitis.

In women, it is a major cause of cervicitis and pelvic inflammatory disease, which can lead to chronic pelvic pain, infertility and ectopic pregnancy. In both sexes, locally acquired infection during oral sex can lead to pharyngitis while disseminated infection from both genital and oral sex can cause gonococcal septic arthritis. Like chlamydia, gonorrhoea is easily tested for with first void urine or, in the case of women, endocervical or high vaginal swabs.

## Syphilis

Infectious syphilis notifications in Aboriginal and Torres Strait Islander people who are residing in remote areas have increased in the last five years. This is related to an outbreak that originated in Far North Queensland in 2015\* and subsequently spread to most of northern Australia. Although there have been several congenital syphilis cases associated with this outbreak, notifications of congenital syphilis overall have remained stable over the last decade. Syphilis notifications are also higher in men who have sex with men. Syphilis management is complicated, and infection is usually asymptomatic, so screening is an important control measure.

Newly acquired syphilis is diagnosed in the presence of symptoms or signs such as chancre, rash, or wartlike condylomata lata, or alternatively this diagnosis is made when previous serology has become positive within two years of the original negative test.

## Human immunodeficiency virus (HIV)

Human immunodeficiency virus (HIV) prevalence in Australia is lower than in most comparable high-income countries and this has been attributed to early adoption of needle and syringe programs (NSPs) and effective early education and community engagement, particularly for those in high-risk groups such as men who have sex with men. Co-infection with chlamydia, gonorrhoea and/or trichomoniasis is a significant risk factor for HIV, both in acquisition and

transmission, highlighting the importance of regular STI screening to reduce the risk of HIV co-infection. HIV incidence in 2015 was more than two times higher for Aboriginal and Torres Strait Islander peoples than for other Australians. Notification rates were highest in Aboriginal and Torres Strait Islander people aged >35 years at 9.8 per 100,000 – nearly three times higher than in the Australian-born non-Indigenous population of the same age group.

(Source: The National Guide Evidence Base. \*Note, one source cited the outbreak was first declared in North West Queensland in January 2011.)

The AIHW review of the two national Indigenous specific primary health care data sets: OSR and nKPI, identified sexually transmissible infections as being a current or emerging health priority area that should be supported by data.

*The Action Plan: Enhanced response to addressing sexually transmissible infections (and blood born viruses) in Indigenous populations* includes an action to investigate the development of a new nKPI for BBV and STI in the context of the review of OSR and nKPI data. Aboriginal and Torres Strait Islander peoples are at higher risk of contracting STIs and BBVs, particularly if living in remote and very remote communities.

Best Practice Guidelines (see summary below) recommend annual screening for chlamydia and gonorrhoea for sexually active Indigenous Australians, with those at higher risk to also be screened for syphilis and HIV. The *National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people* published by NACCHO and RACGP guidelines (the National Guide [here](#)) includes clients up to 39 years if sexual network includes a remote community.

## 2. Analysis

This proposed new process of care indicator primarily focuses on the level of STI screening and testing within Indigenous populations.

The indicator does not intend to replicate the existing process of the National Notifiable Diseases Surveillance Scheme (NNDSS). The NNDSS focus is on results not screening.

There appears to be good appetite for this indicator within the clinical space.

The Northern Territory has an existing sexual health indicator. NT AHKPI 1.17 'sexually transmissible infection' ([here](#)) focuses on tests requested but actually measures both tests requested and results:

- *AHKPI 1.17: 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.*
- *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).***

Clinical feedback concurs with National guidelines and suggests limiting this indicator to look specifically at chlamydia and gonorrhoea might result in availability of more comprehensive data because utilising urine testing is more likely to result in completion of testing (as opposed to blood testing). This would be especially relevant in areas where the test completion rates are lower than the volume of tests being requested. The increase in the prevalence of these infections within the Men who have Sex with Men (MSM) population is also of clinical significance as this group tends to be in the older age bracket and still at risk more than heterosexual only populations. *Source: AIHW STI indicator completed template draft Feb 11 / ACON – acknowledging diverse gender identity in Aboriginal and Torres Strait Islander peoples.*

The record of requested tests in the clinical information system (CIS), is a sound measure of an individual health services screening activity (ie, tests requested) and also enables health services to follow up those clients who do not have the request completed.

As noted in other nKPIs reliant on pathology testing, the lack of national pathology standards and the variation in nomenclature across the many pathology providers is a known limitation to any indicator using pathology measures. Pathology test names vary greatly across pathology laboratories, with local abbreviations. As a national key performance indicator any measurement will need to consider the limitations and challenges of these local variations. For example, the NT AHKPI has worked specifically to accommodate local pathology laboratories terminology. This will be much more challenging across a wider geography with many more pathology providers and there is a risk of incomplete data due to the multiple variations across pathology providers. The implementation of the Australian Digital Health Agency's recommended language using the SNOMED or LOINC search terms may allow for less ambiguity and more straightforward data enquiry and more comprehensive reporting.

The age range of clients varies across guidelines (refer to comparison in section 3 below).

With the introduction of nucleic acid amplification tests (NAATs) or PCR tests in the 1990s, screening for chlamydia, gonorrhoea and trichomoniasis on a single urine or swab test has a high sensitivity and specificity, is much more acceptable to people, and can be reliably performed in places far from laboratories. Point-of-care testing (POCT) is increasingly being taken up in northern Australia. POCT uses robust tests on a par with the NAATs and the time taken for a result can be reduced from weeks to 90 minutes, which can reduce the time to treatment and for contact tracing.

(Source: The National Guide Evidence Base)

## Applicable Guidelines

### The National Guide

General prevention advice for STIs and BBVs in the National Guide ([here](#)):

Preventive intervention type	Who is at risk?	What should be done?	How often?
Screening – chlamydia	All people aged 15–30 years if sexually active	Recommend nucleic acid amplification tests (NAAT) via: <ul style="list-style-type: none"> <li>(for women) endocervical swab if having a concurrent speculum examination, or self-administered vaginal swab, or first void urine</li> <li>(for men) first void urine</li> </ul>	Annually
	All people aged >30 years if sexually active and at high risk (Box 1)		First visit
	All pregnant women		First visit and again in third trimester
	Pregnant women at high risk of STI (Box 1)		Opportunistic
	Women having a termination of pregnancy		
	Men who have sex with men in the presence of other risk factors (Box 1)	Recommend first void urine, throat and anal swab for chlamydia NAAT	Annually or 3–6-monthly if high risk (Box 1)
Screening – gonorrhoea	All people aged 15–30 years if sexually active	Recommend gonorrhoea NAAT via samples as for chlamydia Include screening for chlamydia infection (as above)	Annually
	Pregnant women who are at risk		
	All people aged >30 years if sexually active and at high risk (Box 1)		
	Men who have sex with men	Recommend gonorrhoea NAAT using first void urine Include throat swab NAAT and culture, plus anal swab NAAT and culture	Annually or 3–6-monthly if high risk (Box 1)
Screening – syphilis	All pregnant women	Recommend syphilis serology (refer to Chapter 2: Antenatal care)	At first visit Repeat at 28 weeks' gestation if in a high prevalence area, or if risk factors for STIs are present
	Men who have sex with men Others at high risk of STI (Box 1)	Recommend syphilis serology	Annually or 3–6-monthly if high risk (Box 1)
Screening – human immunodeficiency virus (HIV)	Pregnant women	Offer HIV serology testing	At first antenatal visit
	Men who have sex with men, and others at high risk of BBVs (Box 1)		As part of annual health assessment and 3–6-monthly



The *National Guide* recommends testing based on risk factors as described in Box 1 (p.104):

**Box 1. Risk factors for sexually transmitted infections and blood-borne viruses<sup>6</sup>**

**Risk factors for sexually transmitted infections (STIs)**

- Age <30 years
- Age <39 years and sexual network relates to a remote community
- Multiple current partners
- High rate of partner change
- Engaging in group sex
- New partner
- Using condoms inconsistently
- Live in and have sex with people from areas with a high incidence of STIs
- Having sex while under the influence of drugs and alcohol
- Having sex in exchange for money or drugs
- Prison incarceration
- Victims of sexual assault
- Men who have sex with men where any of the above risk factors are also present

**Risk factors for blood-borne viruses (BBVs)**

- Prison incarceration – current or past
- Blood transfusion prior to 1990
- Tattoos or piercings not performed professionally
- Cultural practices
- Current or past injecting drug use
- Household member with HBV
- Sexual partner with HBV, HCV or HIV
- Infants of mothers infected with HBV, HCV or HIV
- Persons born in regions with a  $\geq 2\%$  prevalence of chronic HBV infection
- Candidates for immunosuppressive therapy

HBV, hepatitis B virus; HCV, hepatitis C virus; HIV, human immunodeficiency virus

The age range in these guidelines is narrower (unless the sexual network relates to a remote community) than the current recommendations from ASHM.

### **Australasian Sexual Health Alliance (ASHA)**

ASHA produce the STI Management Guidelines for use in Primary Care at [www.sti.guidelines.org.au](http://www.sti.guidelines.org.au) which is the culmination of the ASHM and partner organisations work on unifying sexual health guidelines across Australia. These are considered the most comprehensive of the guidelines, and they also utilise multiple resources from the areas around the country for clinical use and effectiveness. ASHA guidelines recommend testing based on risk factors and using a risk assessment tool. There is not universal mention of age ranges across the guidelines as the focus is on control of the illnesses.

STI Management Guidelines for use in Primary Care:

- Regular [testing](#) for chlamydia, syphilis and HIV is recommended for Aboriginal and Torres Strait Islander people, as per the [Standard Asymptomatic Check-up Guideline](#)
- Consideration of self-collection of samples for testing for both chlamydia and gonorrhoea.
- Co-infection of STIs is common in remote and very remote areas.
- Standard asymptomatic check-up:
  - Chlamydia - test for all sexually active people <30 years, as well as anyone who identifies themselves at risk.
  - Gonorrhoea - additional test to consider in asymptomatic individuals.
  - Syphilis - consider for individuals who are not from a high-risk population group. To determine risk, take a sexual history.
  - HIV - consider for individuals who are not from a high-risk population group. To determine risk, take a sexual history.



## **CARPA 7th Ed. 2017**

The *Central Australian Rural Practitioners Association (CARPA) Standard Treatment Manual 7<sup>th</sup> Edition* ([here](#)) has guidance on management of *Sexually Transmissible infections in Male or sistergirl populations* (p271). The current guidelines recommend more frequent testing than ASHM with less focus on risk factors. We understand discussions are in progress to revise these guidelines. Checks are routinely recommended in the 15–35 year age group for chlamydia, gonorrhoea AND if in NT trichomonas plus HIV and syphilis.

CARPA is specifically aimed at remote and rural areas whilst the proposed new nKPI is a national indicator.

CARPA refers to the Women's Business Manual for specific guidelines related to STI checks for women.

## **Remote Primary Health Care Manuals. (2017). Women's Business Manual (6th edition).**

The *Central Australian Rural Practitioners Association (CARPA) Women's Business Manual (WBM) 6th Edition* ([here](#)) has guidance on management of *Sexually Transmissible Infections in Female or brotherboy populations* (p238). WBM specifically focuses on risks for women, and the differing approaches needed. Checks are routinely recommended in the 15–35 year age group for chlamydia, gonorrhoea, trichomonas plus HIV and syphilis.

## Alternative data sources/related indicators in other data collections

- State/Territory based surveillance systems/reports, eg, *NSW STI Programs Unit* ([here](#)) produce the *STIGMA guidelines* (table below); *ACON* ([here](#)).
- Australian Consensus STI Testing Guideline for Aboriginal and Torres Strait Islander People ([here](#)):

Priority Population Testing and Frequency	
People at reduced risk may be tested less frequently. This includes those who are less sexually active or in monogamous relationships	
15-35yo, and high prevalence area <sup>1</sup>	6 monthly
15-35yo and not in high prevalence area <sup>1</sup>	12 monthly
People at increased risk (*one or more new partners in the last 12 months * more than one past STI diagnosis * where substance use heightens risk levels)	3-6 monthly
Older than 35yo, a new partner and in high prevalence area <sup>1</sup>	If at increased risk*, incorporate 1-2 yearly STI check (see below) as part of Adult Health Check or screen opportunistically as required.
Men who have sex with men	3 monthly (plus anal and oropharyngeal swabs) Test according to STIGMA Guidelines
Pregnancy and post-partum <sup>2</sup> and in high prevalence areas <sup>1</sup>	1st visit 1st visit & 28w (STI check with syphilis serology) plus syphilis serology at 36w, birth and 6w post-partum <sup>2</sup>
and at increased risk	Reassess risk at each visit and test if required
Diagnosis or treatment for any STI	STI check at time of treatment and 3 months after treatment
People with symptoms <sup>3</sup>	STI check and clinical evaluation <sup>4</sup>
The following tests should be included in an STI check:	
Males: First pass urine (FPU)	NAAT <sup>6</sup> chlamydia, gonorrhoea <sup>7</sup> , trichomonas <sup>8</sup>
Females: Self-collected vaginal swab <sup>4</sup> or FPU	
Blood test	Syphilis serology HIV antibody/antigen test Consider hepatitis B core antibody, surface antigen, immunisation status and vaccinate if necessary

- National Notifiable Diseases Surveillance System (NNDSS) data, Office of Health Protection, Department of Health – supplies the department with daily notifications of communicable diseases, as well as sharing this information to the states via their various methodologies.
- National HIV Registry – Monitoring the rate across the nation of HIV rates, as well as those classified as late or advanced HIV+ on diagnosis.

## 3. Clinical considerations

### Scope of the indicator

The NT AHKPI indicator 1.17 Sexually Transmissible Infection ([here](#)) reports the total number of clients who are screened for STIs under only four headings: a) Chlamydia AND Gonorrhoea; b) HIV; c) Syphilis; and d) Chlamydia AND Gonorrhoea AND HIV AND Syphilis.

The AIHW indicator template proposes the following:

**Numerator:** Number of Indigenous regular clients aged 15 to 34 years, who were tested for chlamydia and gonorrhoea in the previous 12 months

**Denominator:** Number of Indigenous regular clients aged 15 to 34 years

Feedback from clinical experts in sexual health was to adopt an approach for a national indicator that meets national guidelines. If the focus of the indicator is to encourage broader screening rates then it may be accepted that screening for chlamydia and gonorrhoea may be sufficient scope for the indicator noting that those that are positive may then be screened for Syphilis and HIV. This suggested approach would also yield more complete and accurate results.

With the predominance of first pass urine (FPU) testing of chlamydia and gonorrhoea becoming more of the clinical standard in STI testing, this is the most straightforward implementation of this proposed indicator. Feedback from clinical advisors that the completion rates of blood testing can be lower than a simple FPU sample, has indicated that the speed of request to test will be a key part of this indicator's success.

For specific at-risk populations the use of anal and pharyngeal swabbing is also appropriate.

With most testing guidelines recommending the inclusions of gonorrhoea testing when testing for chlamydia, the inclusion of these two initial tests would be prudent. Given that these two initial tests are commonly done using a urine test, the speed of sampling as well as the opportunistic nature of sample collection means they should have a high rate of completion when requested. When either of these tests return a positive result, that is when most of the clinicians consulted would then recommend further testing, for example serum testing as is the case for Syphilis and HIV. As this collection generally takes longer, the use of this with an initial positive speaks to the reliability of the data when looking at all four tests. This is also recommended as the likelihood of contracting another STI whilst positive with one is higher in the suggested population groups that are being recommended.

Syphilis notifications have increased four-fold in young Aboriginal and Torres Strait Islander people over the years 2010–15. This increase has been driven largely by the current syphilis outbreak across northern Australia. (Source: The National Guide Evidence Base). The outbreak has now spread across Queensland, the Northern Territory, South Australia and Western Australia. There has also been an increase in syphilis notifications for other population groups as well. The National Syphilis Strategic Approach and National Syphilis Surveillance and Monitoring Plan was endorsed by Australian Health Protection Principal Committee (AHPPC) on 23 March 2021 (not yet publicly available).

The Syphilis outbreak also has its own specific working group (Multijurisdictional Syphilis Outbreak Working Group - MJSO) focused on the affected communities and the implementation of harm minimisation and treatment within these groups. Specialist clinical advice suggested measurement for this condition was adequately covered by this working group and that syphilis may not be so relevant in a national indicator as other STIs.

## Age range

The NT AHKPI 1.17 includes clients aged 15-34 consistent with CARPA guidelines. The National Guide limits the age range to 15-30, unless the sexual network includes a remote location, then testing from 15-39 is recommended. The Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) recommends 15-34 only if in remote or very remote areas, but the Aboriginal and Torres Strait Islander specific section of STI Management Guidelines for use in Primary Care has not been updated since 2016.

Based on feedback from clinical experts, expansion of the age range to 39 is recommended to capture the at-risk national population.

## Testing frequency

Recommended testing frequency varies between the differing populations at risk. The minimum recommended testing is 3 monthly, with a maximum interval of 12 monthly for routine testing. The proposed measure of testing within the last 12 months including utilising the most recent result is consistent with guidelines.

## Availability of data

The processing of requesting a test directly within the CIS is essential for accuracy of data.

Test requests are free text. There is no standard use of text per test.

The inclusion of test results is a further challenge to consider. There is huge variance to account for with no national standardised language or testing result standards.

As a result of this the possible combinations of testing and results can number in the tens of thousands. This, paired with the number of available laboratories used for testing, makes for a large data mining exercise that will require significant refinement to accurately detect both testing and results.

Text mining for either test results or requests has its challenges. There are risks that the chosen terms may over report test requests in the case of a complicated test request. Test results also carry a similar risk. Use of selected terms as used in the NT AHKPI ie 'chlam', 'gonor' (see example below for Communicare), could potentially over report where nonsexual health tests include the same combination of characters.

To optimise data accuracy and to minimise over reporting of both tests and results, the list of included terms/abbreviated terms should be carefully selected, plus a list of excluded terms should be considered. For example, searching for HIV will pick up HIV negative/positive but HIV negative/positive are about the client and their past history, not the test itself.

The following reporting criteria is how Communicare currently reports the NT AHKPI. This helps to illustrate the complexity associated with reporting this indicator:

*Evidence of chlamydia, gonorrhoea HIV or syphilis tests is shown by one or more of the following data:*

- (a) A request for an investigation that includes 'chlam' or 'gonor' or 'hiv ' or 'syph'.*
- (b) A request for an investigation that has a keyword containing 'chlam' or 'gonor' or 'syph' or has a keyword of 'hiv'.*
- (c) A Yes/No or checkbox qualifier with the System Code of 'XCL' or 'XGN' or 'XHI' or 'XSY'. (Note these are internal CIS codes allocated to allow customers to use local configuration to collect comparable data).*
- (d) A checkbox qualifier with the description 'CHLAMYDIA/GONORRHOEA PCR TEST PERFORMED' or 'SYPHILIS SEROLOGY TEST PERFORMED'.*
- (e) A dropdown qualifier with the description 'HIV' or 'SYPHILIS TPHA' or 'SYPHILIS TPTA' where any option was selected.*
- (f) A result with a name containing 'chlam' or 'gonor' or 'hiv ' or 'syph'.*

(g) An HL7 result coded thus:

*Chlamydia* - 'cP' (if Western Diagnostic Pathology) or 'hl' (if IMVS).

*Gonorrhoea* - 'gN' (if Western Diagnostic Pathology) or 'lh' or 'YN' (if IMVS).

*HIV* - 'HT' or 'Hv' 'Pu' or 'hV' 'hv' or 'iv' (if Western Diagnostic Pathology).

*Syphilis* - 'Tp' 'cZ' 'sY' 'sy' 'vd' (if Western Diagnostic Pathology) or 'h1' (if IMVS).

(Note these codes are all specific to pathology services contributing to NT AHKPI reports).

Shared with permission from Communicare: based on Version 2.6 of the NT AHKPI October 2019.

## Test results copied to providers

Test results ordered by one provider that are copied to another provider are not necessarily a measure of a specific health services population screening rates but does capture that the population that have been screened.

However, if tests results are included in the data specifications for this indicator then they will usually be captured in the indicator measure. Noting that the population who visit a sexual health service may specifically opt to not have their results sent to (copied to) the GP and therefore will not be captured in the nKPI, resulting in an undercount of screening. This limitation will need to be noted.

## 4. Technical feasibility

There are multiple data sources to consider:

### Use of SNOMED vs LOINC search terms

The use of the SNOMED or LOINC nomenclature in the wording of this KPI would assist in transitioning these terms to greater familiarity within the sector, and as the ADHA is able to further structure digital medical records into the future this will only allow for smoother transition and less confusion over testing and diagnostic terminology within CIS and research systems.

The lack of use of standardised terms, such as those mentioned above, means that there is a possibility of tens of thousands of unique ways of recording gonorrhoea testing within the header rows and test request fields of some CIS within primary care. (Source. MedicineInsight, NPS MedicineWise).

A carefully selected dictionary of terms/acronyms/terminology for tests and results is advised to ensure consistency across CIS vendors and to optimise results by reducing risks of over and/or under reporting.

### CIS Capability

Feedback obtained from the individual vendors on their technical capability and a proposed method to collect this information is in the table below. Note this is vendor feedback. The final implementation should be standardised across all vendors for consistency and comparability of results.

Communicare	To inform the NT AHKPI STI data is currently collected from specific codes in results and specific test request terms, customised as required by health service and laboratory. Point of care test results are also included.
Best Practice	Has capability to count STI test results using LOINC codes and test result names. Can include "copy to" results.
MMEEx	STI is the most difficult data to collect due to variability in the way labs report results and the difficulty of linking results to requests and the variety of ways users make requests. Further complicated by "point of care" tests, which may be recorded in different ways. This KPI is feasible but will require a complex query.
Medical Director	STIs can be reported on by looking at particular pathology results and pathology request types. Carbon Copy results can be included if they are sent in a readable format.

The above table demonstrates that there could be significant development required to identify tests and results within the data. This will then affect the validation capabilities due to the complexity of construction of sample clients and or reports.

Note. The guidelines recommend screening in sexually active people. As clinical information systems cannot determine whether the patient is sexually active this data limitation should be noted.

## 5. Options

The following table outlines some considerations prior to an acceptable recommendation being able to be presented. Note multiple options per consideration could be implemented:

	<b>Consideration</b>	<b>Options</b> <i>Includes associated change where relevant</i>	<b>Implications/ Pros and Cons</b> <i>Discussion points</i>
1	<b>Scope of Disease</b> <b>(select one or more)</b>	a) Chlamydia – FPU or self-collected swab  b) Gonorrhoea – FPU or self-collected swab	Prevalent in >30 population, frequently asymptomatic, easy to diagnose and treat, re-infection possible despite prior infection  Prevalent in MSM population, increasingly antibiotic resistant strain

		<p><i>Note Syphilis and HIV are not included as options at this time but for consideration as a future indicator (see below).</i></p>	<p>Increasing in MSM population, remote prevalence high</p> <p>Declining diagnosis rates due to targeted testing and prevention programs, still of high concern</p>
2	<b>Age range</b>	<p>a) Age 15-30 as per the National Guide, or</p> <p>b) Age 15-39 as per the broader National Guide inclusion, or</p> <p>c) Age 15-34 as per the ASHM guidelines</p>	<p>Note the National Guide also states inclusion of clients up to 39 years if linked to a remote community</p> <p>Which age range is most relevant for a National indicator (for the scope of tests included)</p>
3	<b>Measure via tests requested or test results</b>	<p>For selected diseases include:</p> <p>a) Tests requested, or</p> <p>b) Test results, or</p> <p>c) BOTH</p> <p>d) IF b or c selected (ie, includes results) accept inclusion of results copied to providers</p>	<p>Measurement by both tests and results is the most inclusive measurement, but with what data duplication and loss?</p> <p>Risk of over / under counting</p> <p>Both are used in the NT AHKPI</p>
4	<b>Terminology definition for tests</b>	<p>a) Accept the NT AHKPI definitions</p> <p>or</p> <p>b) Produce comprehensive refined definitions (including exclusions)</p>	<p>NT AHKPI is very localised and existing reporting criteria are specific to the NT</p> <p>Note risks of over and under counting</p> <p>Consistency between vendors</p> <p>Localised terminology - varies significantly; no national standard</p> <p>Future proofing nKPI specifications</p>



## 6. Recommendation

That this indicator be scaled to be in line with clinical recommendations from consulted clinical experts and national guidelines. That is to limit the initial nKPI to Chlamydia and Gonorrhoea testing.

1. Inclusion of Chlamydia and Gonorrhoea as per specialist advice, options 1a and 1b
  - a. Disaggregate by disease, ie, Chlamydia and Gonorrhoea individually, both and neither.
2. Expand the age range to include up to 39 years in line with target populations, option 2b.
3. Include both tests requested and test results, option 3c plus 3d (including copied to results option 3f).
4. Produce bespoke more comprehensive refined definitions for test inclusion, option 4b.
5. Ensure gender permissible values match the existing nKPI specifications, ie, *1 Male, 2 Female, 3 Other, 9 Not stated/inadequately described*.
6. Note limitations of data including: availability of pathology data; lack of consistency of nomenclature; risks of over / under reporting including those tests conducted in sexual health clinics may not be captured (ie, not copied to clients primary health service); inability to determine the sexually active cohort.

### Possible future indicator

Consider future additional indicator if measurement of other STIs is desired.



## Proposal template – new nKPI (Attachment B)

This template supports the process outlined in the *Indicator selection and maintenance framework for the nKPI collection* (the Framework). It is used to:

- submit a proposal to add a new indicator to the nKPIs
- record associated discussion and decisions in a consistent format
- enhance transparency around the decision-making process.

A description of each section of the template is provided in the table below, with further instructions provided in the template itself.

Section	Description
Submitter information	Captures the details of the submitting organisation. Completed by submitter.
A. Proposal indicator specification	Outlines the proposed indicator specifications. Completed by submitter.
B. Assessment against individual criteria	Records the submitter response to each review criteria and the committee's* assessment. Completed by submitter and the committee.
C. Committee* assessment and recommendations	Records a summary of the committee's* assessment along with their decision and any follow-up actions required.
D. Department of Health decision and follow-up actions	Records the decision made by the Department of Health and any follow-up actions required.
Appendix A: additional information	Records additional information to support the proposal, for example, evidence of any preliminary analyses/implementation/pre-testing. Completed by submitter.

*\*Note that initial consideration of the proposal is made by the Health Services Data Advisory Group (HSDAG). HSDAG may decide to convene the Specialist Working Group (SWG) to seek additional advice on the proposal. If the SWG is consulted, that should be noted in the template.*

*To be completed by submitter*

Submitter information	
Contact name	Nick Pascual
Contact email	nick.pascual@health.gov.au
Contact phone number	(02) 6289 5210
Submitting committee/agency/organisation	Australian Government Department of Health

To be completed by submitter

Section A: Proposed indicator specifications	
<b>Proposed indicator name</b>	Proportion of Indigenous regular clients who were tested for one or more sexually transmissible infections (STIs)
<b>Type of indicator</b> <i>Select one option only</i>	<input checked="" type="checkbox"/> Process-of-care <input type="checkbox"/> Health outcome
<b>Reason for proposed inclusion</b>	<p>Aboriginal and Torres Strait Islander people are at higher risk of contracting STIs, particularly if living in remote and very remote communities. Untreated STIs can have significant effects on the health of individuals (such as infertility) and communities (e.g. recent syphilis outbreaks).</p> <p>An analysis of previous research has shown that embedding STI screening within a Continuous Quality Improvement approach increased screening and rescreening rates (Schierhout et al. 2016).</p> <p>The <i>Action Plan: Enhanced response to addressing sexually transmissible infections (and blood born viruses) in Indigenous populations</i> includes an action to investigate the development of new nKPI for BBV and STI in the context of the review of OSR and nKPI data.</p>
<b>Rationale for indicator</b> <i>Outline why the indicator is important. Include relevance to services and policy makers.</i>	<p>An increase in the number of people tested annually for STIs will identify asymptomatic infections. Early detection, if the STI is treated, will reduce the time a person is infectious and therefore assist in reducing transmission rates. It will also reduce the likelihood of complications or adverse outcomes to the individual.</p> <p>As noted in the NT AHKPIs, “<i>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.</i>”</p>
<b>Proposed definition</b>	Proportion of Indigenous regular clients aged 15–34 <sup>1</sup> who were tested for one or more STIs (chlamydia, gonorrhoea) within the previous 12 months. <sup>2</sup>

<sup>1</sup> Note that the NACCHO/RACGP guidelines suggest an age range of 15–30, but feedback from the Department and the December 2020 HS DAG meeting suggested increasing the upper age range to 34.

<sup>2</sup> The guidelines recommend only testing for syphilis or HIV if the client is identified as high risk. One of the factors for considering a person at high risk for STIs is that they live in and have sex with people from areas with a high incidence of STIs. Syphilis could be added to the indicator if the current outbreak is deemed to be national in scope.

## Section A: Proposed indicator specifications

<p><b>Proposed calculation</b></p> <p><i>Include computation, and specify numerator and denominator.</i></p>	<p><b>Computation:</b> <math>(\text{Numerator} \div \text{Denominator}) \times 100</math></p> <p><b>Numerator:</b> Number of Indigenous regular clients aged 15–34 years, who were tested for chlamydia and gonorrhoea in the previous 12 months.</p> <p><b>Denominator:</b> Number of Indigenous regular clients aged 15–34 years</p>
<p><b>Proposed disaggregation</b></p> <p><i>Be specific, for example, if disaggregation is by age group specify the age groups.</i></p>	<p><b>1. Age group:</b></p> <ul style="list-style-type: none"> <li>a) 15–19</li> <li>b) 20–24</li> <li>c) 25–29</li> <li>d) 30–34.</li> </ul> <p><b>2. Sex:</b></p> <ul style="list-style-type: none"> <li>a) male</li> <li>b) female</li> </ul>

**Submitter**—complete ‘Submitter—response to criteria’ ensuring to provide responses to all criteria.

**Committee facilitator**—complete ‘Committee—record of discussion. Use the information provided by the submitter as a starting point and record the key points from the discussion, including if the submitter’s assessment against the criterion is not agreed with. Record the assessment (not met at all, partially met, fully met) for the criterion and provide an explanation for the assessment. While separate questions may be included within each criterion, only an overall assessment for the criterion is required to be recorded.

Section B. Assessment against individual criteria		Date discussed by committee: 23/4/21	
<b>B1. Importance</b> <i>Importance can be judged on a number of dimensions, including community priorities, gap between evidence and practice, relationship to morbidity and/or mortality, national priorities etc.</i>			
Criteria	Submitter—response to criteria	Committee—record of discussion	
<p><b>For process-of-care indicators</b>—indicator captures an aspect of primary care delivery that is important for Aboriginal and Torres Strait Islander clients.</p> <p><b>For health-outcome indicators</b>—indicator captures a health status or level of risk that has important implications for the health and wellbeing of Aboriginal and Torres Strait Islander clients.</p>	<p>Aboriginal and Torres Strait Islander peoples are at higher risk of contracting STIs and BBVs, particularly if living in remote and very remote communities.</p> <p>An increase in the number of people tested annually for STIs will identify asymptomatic infections. Early detection, if the STI is treated, will reduce the time a person is infectious and therefore assist in reducing transmission rates. It will also reduce the likelihood of complications or adverse outcomes to the individual.</p> <p>Discussions about sexual/reproductive health are recommended as part of Indigenous health checks.</p>	<ul style="list-style-type: none"> <li>The Working Group noted that there is a lot of data relating to sexually transmissible infections (STI) more broadly, however there is limited data relating to testing of STIs. It was therefore agreed that this new indicator would meet this gap.</li> <li>The Working Group discussed that this indicator is focused on preventative health and more targeted at young people. It was noted that there is increased appetite across the sector to include more preventative health indicators, as well as to consider younger Aboriginal and Torres Strait Islander peoples in the nKPI collection.</li> <li>It was suggested that consultation with the sector will be necessary to confirm the importance of including this new indicator in the nKPI collection.</li> </ul>	
<b>Committee—assessment of extent criterion met</b> <i>Select one option only</i>		Assessment	Reason
		<input type="checkbox"/> Not met at all <input type="checkbox"/> Partially met <input checked="" type="checkbox"/> Fully met	<b>Indicator meets a gap in reporting of STI testing.</b>

<b>B2. Acceptability</b>		
<b>Criteria</b>	<b>Submitter—response to criteria</b>	<b>Committee—record of discussion</b>
Indicator is widely accepted	<p>STI indicators are currently collected in the NT AHKPI collection and the NSW Aboriginal Health Program KPIs (noting that NSW is about to change their indicator).</p> <p>The AIHW Review found that 73% of the survey respondents thought that a national nKPI focused on STIs/BBVs would have value (another 18% responded that they didn't know whether there would be value, and 10% thought there would not be any value in it). In their discussions and feedback during the Review, organisations made it clear that while there was support for a screening indicator, there was not support for an outcome indicator which would document positive results.</p>	The HS DAG Working Group agreed with the information provided in the template.
Indicator and process of collecting is culturally safe	<p>Both the NT AHKPIs and the NSW KPIs are developed and modified in consultation with their NACCHO affiliates.</p> <p>Discussions around sexual health, sexual activity, and risk of STIs/BBVs need to be conducted in a culturally appropriate and sensitive manner.</p>	The HS DAG Working Group agreed with the information provided in the template.
Collection of indicator is ethical	<p>Screening asymptomatic clients is essential for identification and early treatment of STIs, prevention of outbreaks, and prevention of complications among clients with positive results.</p> <p>The indicator only reports aggregate data on the proportion of the age group who have been tested for STIs – it does not include the results of those tests.</p> <p>As noted in the CARPA manual, however, there may be jurisdictional rules for whether parental permission is required for the younger age group to have a screening test (e.g. 15-16 year olds).</p>	The Working Group discussed concerns about the ethical considerations and potential unintended consequences of publicly reporting sexual health data. It was suggested that measures be considered to identify the most appropriate way to collect and report this data.
Health services are prepared to implement the indicator	Both government and community controlled organisations currently report STI testing in the NT (only community controlled organisations report in NSW).	The HS DAG Working Group agreed with the information provided in the template.



B2. Acceptability			
Criteria	Submitter—response to criteria	Committee—record of discussion	
	The AIHW Review found there was support for a testing indicator, noting that it would also help fill a gap in the nKPIs by focusing on preventive care for young people.		
<p>Inclusion in nKPIs provides more value than alternative sources of data</p> <p><i>Describe why collecting in the nKPIs is better than collecting via another data source. Applies to where a similar, or related, indicator exists in another data collection, and to completely new measures.</i></p>	<p>The purpose of the nKPIs is to provide information organisations can use for CQI. While national data is available on STI pathology tests billed through Medicare, these are not Indigenous-specific item numbers, will not pick up tests that have not been claimed, and are not reported at an organisation level.</p> <p>Data on those with positive results are included in various collections, such as the National Notifiable Diseases Surveillance System (NNDSS) data, Office of Health Protection, Department of Health and the National HIV Registry, but they do not include screening data.</p>	<p>The HS DAG Working Group agreed with the information provided in the template.</p>	
<p><b>Committee—assessment of extent criterion met</b></p> <p><i>Select one option only</i></p>		<b>Assessment</b>	<b>Reason</b>
		<input type="checkbox"/> Not met at all <input type="checkbox"/> Partially met <input checked="" type="checkbox"/> Fully met	<p><b>It was discussed that each of the components relating to Criteria B2: Acceptability were met, however it was noted that sector consultation will be useful to confirm the acceptability.</b></p>

B3. Evidence base		
Criteria	Submitter—response to criteria	Committee—record of discussion
<p>Indicator is derived from a high quality evidence base</p> <p><i>For example, it is based on clinical/best practice guidelines.</i></p> <p><i>Provide details on the strength of the evidence supporting the indicator—for example, NHMRC grading if available.</i></p>	<p>The current specifications are drawn from the <i>NACCHO/RACGP National Guide to a Preventive Health Assessment for Aboriginal and Torres Strait Islander People</i> and associated <i>Evidence Base</i>.</p> <p>Note that these guidelines differ from those of the <i>Fifth National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmissible Infections Strategy 2018–2022</i> which recommend screening all those in the target age group for HIV and syphilis in addition to chlamydia and gonorrhoea.</p>	<p>The HS DAG Working Group agreed with the information provided in the template.</p>
<p>Indicator aligns with evidence base</p>	<p>The evidence-base supports Aboriginal and Torres Strait Islander peoples aged 15–30 who are sexually active being offered an annual STI check, with tests for gonorrhoea and chlamydia.<sup>3</sup></p> <p>The recently released ASHM guidelines have an increased age range, and also now only recommend HIV and syphilis tests for those at risk.</p> <p>The denominator will include all regular clients in the age group, regardless of whether they are sexually active or not – the accompanying documentation for the indicator will need to acknowledge this.</p>	<p>The Working Group discussed that the age range should include only 15 to 35 years in line with clinical guidelines.</p>
<p>There is limited variation in the evidence base</p> <p><i>Describe any variation in the evidence base. For example, is variation uniform across Australia or is there regional variation which</i></p>	<p>Previous differences in the recommendations for which tests to conduct as population screening between NACCHO/RACGP and ASHM have now been reconciled.</p> <p>There are differences in the recommendations between the NACCHO/RACGP Guidelines and the CARPA guidelines, with CARPA recommending testing for HIV and syphilis as well as</p>	<p>It was noted that the current NACCHO and RACGP guidelines are in alignment regarding the STIs that are recommended to be screened, namely annual screening for chlamydia and gonorrhoea for sexually active people, with those at higher risk to be also screened for syphilis and HIV.</p>

---

<sup>3</sup> Note that the NACCHO/RACGP guidelines suggest an age range of 15–30, but feedback from the Department and the December 2020 HS DAG meeting suggested increasing the upper age range to 34.

B3. Evidence base			
Criteria	Submitter—response to criteria	Committee—record of discussion	
<i>affects acceptability and appropriateness of indicator.</i>	gonorrhoea and chlamydia, but these relate to those in remote areas.		
<b>Committee—assessment of extent criterion met</b> <i>Select one option only</i>		Assessment	Reason
		<input type="checkbox"/> Not met at all <input type="checkbox"/> Partially met <input checked="" type="checkbox"/> Fully met	<b>The HS DAG Working Group agreed that the indicator meets the criteria above.</b>

B4. Actionable			
Criteria	Submitter—response to criteria	Committee—record of discussion	
<p><b>For process-of-care indicators:</b></p> <ul style="list-style-type: none"> <li>Results can be used to improve practice (that is, are actionable and within control of the organisation), which can contribute to improved health and wellbeing of clients in the future.</li> </ul> <p><b>For health-outcome indicators:</b></p> <ul style="list-style-type: none"> <li>The outcome itself (for example, the result) is amenable to change or improvement for individual clients.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Indicator provides information that the organisation can use for planning and resourcing purposes.</li> </ul>	<p>The data would enable an assessment of the current level of testing activity at the organisation level.</p> <p>Organisations can use the results to identify whether further action is required in this area (e.g. health promotion materials or training for health professionals to feel comfortable discussing).</p> <p>As this is a process of care indicator, time series data would show whether there have been improvement in screening rates.</p> <p>Higher screening rates would allow for treatment of asymptomatic cases and improve the reproductive and sexual health of Indigenous Australians.</p>	<ul style="list-style-type: none"> <li>The Working Group discussed current STI data collection and reporting in the NT. It was noted that the sexual health indicator is used extensively and provides useful information to health services.</li> <li>It was noted that a sexual health indicator is particularly useful in remote communities and in areas where the presence of only male health workers may affect testing rates.</li> <li>The Working Group discussed the usefulness of a sexual health indicator in urban areas, where it was stated that people may seek STI testing from different services and health clinics. It was suggested that this may skew the data.</li> <li>The Working Group noted a limitation in instances where clients seek STI testing from a sexual health clinic and decline for results to be sent to their primary care provider.</li> <li>The Group suggest that being able to compare data between sites in similar environments is useful.</li> </ul>	
<p><b>Committee—assessment of extent criterion met</b></p> <p><i>Select one option only</i></p>		Assessment	Reason
		<input type="checkbox"/> Not met at all <input type="checkbox"/> Partially met <input checked="" type="checkbox"/> Fully met	<p><b>As per comments above.</b></p>

B5. Technical considerations and data quality		
Criteria	Submitter—response to criteria	Committee—record of discussion
Indicator has clearly defined counting and calculation rules <i>For example, numerator, denominator, exclusions.</i>	The counting and calculation rules are clear (see Section A).	The HS DAG Working Group agreed with the information provided in the template.
Data are currently available in the right format to populate the indicator	<p>The data are drawn from clinical records. The extraction tools exist for Communicare and PCIS (NT) and for all vendors in NSW, noting that there is likely to be a need for standardisation of terminology across vendors.</p> <p>In initial consultations with the main CIS vendors it was noted that implementation is feasible in all systems, despite some complexity. The CIS vendors anticipate that accurate reporting of the specified calculation will require the stitching together of a number of data components: requests for STI tests, STI test results from pathology labs, point-of-care testing in health services and ‘copy to’ results received where the request originated outside the health service. Interpretation of pathology results from labs using non-standard coding continues to be a challenge for CIS vendors, hence the counting of requests as well. Where needed, vendors can attempt to parse the results text to infer meaning although this is generally only done where other data sources are not available. None of the CIS will need any core system changes, only report changes.</p> <p>Vendors noted that point-of-care tests may be recorded in different ways. If point-of-care testing is used (rather than sending samples to pathology), it needs to be recorded within the client’s records in a similar way in order to be counted.</p>	The HS DAG Working Group agreed with the information provided in the template.
Technical specifications match the intent of the indicator	The intent of the indicator is to capture the proportion of the eligible client population who have had STI tests. The technical specifications match this, with the exception of being able to capture only those who are sexually active.	The HS DAG Working Group agreed with the information provided in the template.

B5. Technical considerations and data quality			
Criteria	Submitter—response to criteria	Committee—record of discussion	
Indicator is unambiguous in its interpretation	The indicator results will show the proportion of the relevant client population screened. The results themselves may be a mixture of client preference (to be screened or not screened) as well as organisational factors (e.g. not having male and female GPs, nurses or Aboriginal Health Workers).	The Working Group raised concerns about inconsistencies in pathology laboratory coding and discussed whether the counting rule should include test requested or test results received or both.	
Results are robust enough for use at the individual service level and for national reporting	NT to provide information on this based on their AHKPI.	The Working Group discussed issues with discrepancy between tests requested and tests received due to issues with pathology laboratory coding.	
Results are valid and reliable across subgroups and geographic regions	NT to provide information on this based on their AHKPI.	It was noted that smaller health services, or health services with lower STI testing rates, may be disadvantaged by only including test results.	
There are no known data quality issues in related data collections <i>If a similar, or related, indicator exists in another data collection, outline any known data quality issues. For example, in a jurisdictional KPI collection such as the NT KPIs.</i>	NSW has raised concerns about differing LOINC2 codes across the individual CISOs.	The Working Group agreed to implement the indicator in a staged approach in order to assess data quality and the usefulness of the indicator.	
The indicator reflects real change and is not masking other factors	The indicator should be responsive to real changes. As noted, sexual health/STIs are sensitive in nature, and changes may be required for clinicians, social norms, and clients' willingness to see testing rates increase.	The HS DAG Working Group agreed with the information provided in the template.	
<b>Committee—assessment of extent criterion met</b> <i>Select one option only</i>		<b>Assessment</b>	<b>Reason</b>
		<input type="checkbox"/> Not met at all <input checked="" type="checkbox"/> Partially met <input type="checkbox"/> Fully met	<b>Note issues with data quality and discrepancy between tests requested and test results. The HS DAG Working Group put forth recommendations to test and analyse data quality before implementing the indicator more broadly.</b>





B6. Comparability			
Criteria	Submitter—response to criteria	Committee—record of discussion	
Results can be compared across organisations and/or over time within the organisation	<p>The results should be comparable over time within organisations and between organisations who share the same CIS.</p> <p>Once the LOINC codes are standardised the results should be comparable between organisations.</p>	<p>The Working Group noted that there may be variation in data collection and reporting between urban and regional / remote locations due to the increased availability of services in urban locations, however results are comparable between like services.</p>	
<b>Committee—assessment of extent criterion met</b> <i>Select one option only</i>		Assessment	Reason
		<input type="checkbox"/> Not met at all <input type="checkbox"/> Partially met <input checked="" type="checkbox"/> Fully met	<b>As per comment above.</b>

B7. Variation			
Criteria	Submitter—response to criteria	Committee—record of discussion	
<p>There is enough variation in the results to be useful</p> <p><i>For example, the indicator is responsive enough that when something changes it is meaningfully reflected</i></p>	<p>NT AHKPI 2019/20 data showed that the proportion of eligible clients screened for gonorrhoea and chlamydia ranged from 30% to 63%, with an NT average of 44%.</p> <p>The proportion of eligible clients screened for syphilis ranged from 28% to 63%, with an NT average of 43%.</p>	<ul style="list-style-type: none"> <li>The Working Group raised concerns about the variation in pathology providers and the different ways in which STI test results are received. It was noted that the increased availability of different pathology providers makes interpreting test results more complicated.</li> <li>It was noted that testing rates were significantly different between the NT and NSW. It was suggested that this might be as a result of differences in pathology providers and/or testing rates.</li> <li>The HS DAG Working Group requested additional information in Working Group session 10 to inform their decision for this criterion. Following this input which was discussed in Working Group session 11, it was agreed that there is sufficient variation.</li> </ul>	
<p><b>Committee—assessment of extent criterion met</b></p> <p><i>Select one option only</i></p>		Assessment	Reason
		<input type="checkbox"/> Not met at all <input checked="" type="checkbox"/> Partially met <input type="checkbox"/> Fully met	<p><b>As per comments above.</b></p>

B8. Risk			
Criteria	Submitter—response to criteria	Committee—record of discussion	
The known or potential risks or unintended consequences of collecting and reporting are either minimal or can be managed	Discussions by clinicians around sexual behaviour and screening with their clients need to be conducted in a sensitive and safe manner. Support for this is required to ensure that there are no harmful effects.	It was noted that there have not been any negative consequences experienced in the NT.	
The benefits of collecting the indicator outweigh the burden of reporting for services	As the CIS are capable of extracting the data (as shown by the NT and NSW experiences, although there are technical issues), the burden on the services should not be extensive.  The usefulness of the indicator will lie in the extent to which organisations are able to use it for CQI.	A general risk was noted whereby clinicians may feel disheartened if there are technical issues with the implementation of the nKPI.	
The associated resource implications and costs are either minimal or can be managed	The costs for the inclusion of the indicator would relate to education at the organisation level, alignment of specifications across vendors and changes to the HDP.	The Working Group discussed point of care testing technology and noted that results are configured to integrate directly into the Communicare clinical information system (CIS).	
<b>Committee—assessment of extent criterion met</b>  <i>Select one option only</i>		Assessment	Reason
		<input type="checkbox"/> Not met at all <input type="checkbox"/> Partially met <input checked="" type="checkbox"/> Fully met	<b>The HS DAG Working Group agreed that there have not been any negative consequences in the NT and therefore there is limited potential risk with implementing this indicator.</b>

**Committee facilitator**—record the key points from the discussion and summarise the advantages/disadvantages of adding the indicator. Record the final group recommendation and assessment of priority, noting any dissenting opinions.

Section C. Assessment and recommendations		
<b>Summary of discussion</b>  <i>Record an overview of the assessment noting key advantages and disadvantages of the proposal</i>	<p>Advantages</p> <ul style="list-style-type: none"> <li>The Working Group noted that there is a lot of data relating to sexually transmissible infections more broadly, however there is limited data relating to testing of STIs. It was therefore agreed that this new indicator would meet this gap.</li> <li>The Working Group discussed that this indicator is focused on preventative health and more targeted at young people. It was noted that there is increased appetite across the sector to include more preventative health indicators, as well as to consider younger Aboriginal and Torres Strait Islander peoples in the nKPI collection.</li> </ul> <p>Disadvantages</p> <ul style="list-style-type: none"> <li>The Working Group raised concerns about the variation in pathology providers and the different ways in which STI test results are received. It was noted that the increased availability of different pathology providers makes interpreting test results more complicated.</li> </ul> <p>Next steps</p> <ul style="list-style-type: none"> <li>The HS DAG Working Group recommended the following key considerations for implementing this indicator into the nKPI collection: <ul style="list-style-type: none"> <li>The indicator be rolled out to a select number of health services for the first two reporting cycles.</li> <li>The data is not publicly reported on for the first two reporting cycles.</li> <li>The data is analysed during the first two reporting cycles to understand its usefulness and if the indicator is fit-for-purpose.</li> <li>Following the first two reporting cycles, the HS DAG Working Group review the indicator and make a recommendation to the HS DAG to continue or retire the indicator.</li> </ul> </li> </ul>	
<b>Feasibility</b>  <i>Consider the proposal and any briefing papers accompanying the proposal and document advice against the specified areas on the feasibility of including the indicator</i>	Service data collection/recording processes	Please refer to the briefing paper for further information.
	Client Information Systems (CIS)	Please refer to the briefing paper for further information.
	National reporting	Please refer to the briefing paper for further information.
<b>Recommendation</b>	<input checked="" type="checkbox"/> Supported for inclusion	<i>Provide modifications to specifications, if applicable</i> <ul style="list-style-type: none"> <li>The HS DAG Working Group endorsed the recommendations to:</li> </ul>

## Section C. Assessment and recommendations

<p><i>Select one option only</i></p>		<ul style="list-style-type: none"> <li>○ Include chlamydia and gonorrhoea as per specialist advice but not to disaggregate by disease.</li> <li>○ Produce bespoke more comprehensive refined definitions for test inclusion.</li> <li>○ Ensure gender permissible values match the existing nKPI specifications (e.g. 1 male, 2 female, 3 other, 9 not stated / inadequately described).</li> <li>● The Working Group did not endorse the recommendations to:             <ul style="list-style-type: none"> <li>○ Expand the age range up to 39 years in target populations.</li> <li>○ Include both tests requested and test results.</li> </ul> </li> <li>● The Working Group agreed on the following additional recommendations:             <ul style="list-style-type: none"> <li>○ To not disaggregate by disease.</li> <li>○ To include the age range 15 to 35 years in line with clinical guidelines.</li> <li>○ To add tests declined to the limitations.</li> <li>○ To include test results only, with consideration of the following:                 <ul style="list-style-type: none"> <li>— The indicator be rolled out to a select number of health services for the first two reporting cycles.</li> <li>— The data is not publicly reported on for the first two reporting cycles.</li> <li>— The data is analysed during the first two reporting cycles to understand its usefulness and if the indicator is fit-for-purpose.</li> <li>— Following the first two reporting cycles, the HS DAG Working Group review the indicator and make a recommendation to the HS DAG to continue or retire the indicator.</li> </ul> </li> </ul> </li> </ul>
	<input type="checkbox"/> Not supported for inclusion	<p><i>Provide reason(s)</i></p>
<p><b>Assessment of priority</b></p> <p><i>Reflects how important is it in practice for the change to be made.</i></p> <p><i>Select one option only.</i></p> <p><i>Provide reason(s) if applicable.</i></p>	<input type="checkbox"/> High	
	<input type="checkbox"/> Medium	
	<input type="checkbox"/> Low	
<p><b>Follow up actions required</b> <i>(add additional rows as required)</i></p>		
<p>Action 1: Report Working Group recommendations to the HS DAG.</p>	<p>Responsible party: The Department</p>	<p>Timeframe: July 2021 HS DAG meeting</p>

## Section D. Department of Health decision and follow-up actions

<b>Decision</b> <i>Select one option only</i>	<input type="checkbox"/> HS DAG recommendations accepted	
	<input type="checkbox"/> HS DAG recommendations not accepted	<i>Provide reason(s)</i>
<b>Assessment of priority</b> <i>Reflects how important is it in practice for the change to be made</i> <i>Select one option only</i>	<input type="checkbox"/> High	
	<input type="checkbox"/> Medium	
	<input type="checkbox"/> Low	
<b>Follow up actions required</b> <i>(add additional rows as required)</i>		
Action 1:	Responsible party:	Timeframe:
Action 2:	Responsible party:	Timeframe:

## Appendix A. Additional information

*For example, evidence of any preliminary analyses/implementation/pre-testing*