Australian Government
Australian Institute of
Health and Welfare

Review of the two national Indigenous specific primary health care datasets

The Online Services Report and the national Key Performance Indicators

AIHW

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Australian Institute of Health and Welfare
Canberra

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Contents

Summary

The Commonwealth Department of Health (the Department) commissioned the Australian Institute of Health and Welfare (AIHW) to undertake a comprehensive review of the Online Services Report (OSR) and the National Key Performance Indicators (nKPIs). These collections are two of the main sources of data from health organisations funded to deliver primary health care services to Aboriginal and Torres Strait Islander Australians. This report summarises the outcomes of that review.

Purpose

The main objectives of the review were, for each collection, to:

- clarify their purpose and reporting requirements
- identify their strengths and weaknesses
- develop actionable options (recommendations) around how they can better meet the needs of key stakeholders (health services, peak bodies, funders, and policymakers) in the future, including providing options to:
  - ensure better alignment and synergy between the two collections
  - reduce reporting burden for health services
  - improve the usefulness of the collections for key stakeholders.

Approach

The AIHW took a conceptually-based and collaborative approach to the review, based on the National Aboriginal and Torres Strait Islander Health Data Principles (AHMAC 2006). Engagement and consultation with a wide range of stakeholders through in-depth interviews, online surveys and national workshops was brought together with the findings from a policy and literature review to identify key issues and potential solutions.

Engagement with stakeholders was critical for the review, especially those who collect and report the data. In total, representatives from 131 different Indigenous-specific primary health care services (ISPHCS) that report to the OSR and/or the nKPIs participated in at least one of the three types of consultations. Participating services represented all types of services involved in the collections (community-controlled, other non-government organisation (NGO), and government), as well as all remoteness areas.

Participants also included the National Aboriginal Community Controlled Health Organisation (NACCHO), the NACCHO Affiliates who support the community-controlled ISPHCS, the Royal Australian College of General Practitioners (RACGP), 3 Government Departments, 2 national committees, and 4 software vendors.

The review focused on five themes for each collection—purpose, usefulness, content, reporting burden, and ways forward.

Key findings

In general, while participants acknowledged the importance of both collections for national reporting and policy development, the review found that:

- there could be more clarity around the purpose of the collections
- there was variation in the extent to which different stakeholders found the collections useful
- improvements could be made to the content of the collections, including revising items in the OSR to better reflect what ISPHCSs do, and ensuring the nKPIs (as individual indicators and as a set) maintain their relevance and continue to meet current clinical and best practice guidelines
- the burden of reporting could be reduced, for example, by streamlining the OSR collection instrument, and improving training material for clinical information systems (CIS).

While the focus of the review was on the individual aspects of each collection, it also identified a number of broader themes which applied to both collections, including:

- the importance of high quality and meaningful data for the improvement of health services and health outcomes for Aboriginal and Torres Strait Islander Australians at both the service and policy levels
- the need to view the OSR and nKPIs in context of the broader environment in which they operate, and considering them as related collections rather than in isolation
- the impact of reporting requirements outside of the OSR and nKPIs which add to overall reporting burden for the health services
- the need for a clearer and more inclusive data development process, recognising that such a process helps to ensure that the data collected benefit a wider range of stakeholders
- the desire to strengthen governance arrangements.

The recommendations in this report are designed to be a starting point for further discussions. Such discussions must be based around appropriate data development principles and will need to consider the implications, impacts and costs of the recommendations versus the benefits of changing the collections.

1 Introduction

In May 2018, the AIHW was commissioned by the Department to undertake a comprehensive review of two data collections—the OSR and the nKPIs. These collections are the two main sources of data from health organisations funded to deliver services to Aboriginal and Torres Strait Islander Australians through the Indigenous Australians' Health Programme (IAHP). This report summarises the outcomes of that review.

Structure of this report

The introduction to this report outlines the background and approach taken for the review. Section 2 presents high-level findings that apply to both collections. Sections 3 and 4 then focus on the OSR and the nKPIs, respectively. Section 5 outlines recommendations related to governance and data development for both collections. Section 6 looks at progress made in the period between the review being conducted and the release of this report.

1.1 Background

Comprehensive and culturally appropriate primary health care services play a key role in the improvement of the health and wellbeing of Aboriginal and Torres Strait Islander Australians through prevention, early intervention, health education, and the timely identification and management of physical and psychological issues (Griew et al. 2008). To that end, the Australian Government provides funding through the Indigenous Australians' Health Programme (IAHP) to a network of primary health care services designed to be accessible to Aboriginal and Torres Strait Islander clients, many of whom have complex needs. In this report, those services are referred to as Indigenous-specific primary health care services (ISPHCS).

The ISPHCS are administered and run by:

- Aboriginal community-controlled health organisations (ACCHOs)
- state/territory/local health services
- NGOs, such as women's health services (a small proportion of services).

The services vary in size, location, governance structure, length of time in operation, workforce composition, sources of funding, the services they offer, the ways in which they operate (whether stand alone or part of a consortium) and the needs of their clients. What they all share in common is a holistic approach to meeting the needs of their Indigenous clients.

As part of their IAHP funding agreements with the Australian Government, the ISPHCS are required to report to two national data collections:

- OSR—collects data annually (covering 1 July–30 June) on the organisations' characteristics, workforce, client numbers and services provided
- nKPIs—collects 15 process-of-care and 9 outcome indicators for the organisations' Indigenous regular clients twice a year (covering 1 July–31 December and 1 January–30 June).

The AIHW is the data custodian for both collections and manages them on behalf of the Department. Organisations submit their data through an online portal.[1] The AIHW prepares service level reports for each reporting organisation and produces national reports for public release (AIHW 2019a, AIHW 2019c).

The OSR and nKPIs provide important information on the ISPHCS and their clients, and they are the primary source for reporting on the activities of the funded services. There is no corresponding information on Indigenous Australians accessing mainstream primary health care services. In addition to national reporting, the AIHW has also used these data to examine spatial variation in Aboriginal and Torres Strait Islander Australians' access to primary health care (AIHW 2015b), the spatial distribution of the clinical health workforce and its relationship to the distribution of the Indigenous population (AIHW 2016b), and Aboriginal and Torres Strait Islander women's access to four types of maternal health services (AIHW 2017c).

However, a number of issues have been identified with the OSR and nKPIs. These issues include:

- they are limited in scope
- they lack clarity and understanding as to their purposes
- their relevance and usefulness to all stakeholders or services is questioned
- the definition of 'regular client' in the nKPIs is problematic
- the accuracy and meaningfulness of the data collected is questioned[2]
- there is a need to find an optimal balance between the collection burden and utility of data to providers
- the collections have gaps and some overlap in their data.

The Department commissioned the review to address these issues and to ensure that the OSR and nKPIs are fit for purpose.

1.2 Purpose and scope of the review

The main objective of the review was to provide the Department with actionable options to:

- ensure better alignment between the two collections, particularly around consistency of terminology and business and counting rules
- ensure synergies between the two collections are understood and better utilised
- reduce the reporting burden on individual health services
- ensure the data support current and emergent health priorities (for example, ear health, eye health, sexually transmitted infections, and mental health).

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[1] Between 2013 and 2018, organisations reported data through OCHREStreams, which was developed and hosted by the Improvement Foundation (IF). From the December 2018 nKPI collection forward, organisations are reporting through the Health Data Portal (HDP), developed and hosted by the Department.

[2] The Department funded separate projects that specifically focus on issues around data collection and reporting processes to improve the data quality of the two collections. These include the KPMG data quality assessment and support project; Barnett & Associates nKPI harmonisation project; and the Doll Martin Associates Data validation project.

- ensure the data are useful and have value to numerous stakeholders, including the ISPHCS who collect and report the data and their supporting organisations as well as to funders, policymakers, and researchers (see Table1.1)

Table 1.1: Key stakeholders for the review

Key stakeholder groups:
● individual health organisations/health services who report to the OSR and/or the nKPIs ● government departments (the Department, the Department of the Prime Minister and Cabinet (PM&C),[3] and the AIHW) ● peak bodies (NACCHO and the NACCHO Affiliates,[4] RACGP) ● national committees (Aboriginal and Torres Strait Islander Health Data Advisory Group (HS DAG) and National Aboriginal and Torres Strait Islander Health Standing Committee (NATSIHSC)) ● software vendors (Communicare, MMEX, Medical Director, Best Practice).

Working with the Department, the AIHW identified items which were to be included in the review (in-scope) and items that were not part of the review (out-of-scope) (Table 1.2).

Table 1.2: Review scope

In-scope:	Out-of-scope:
● how the collections map to other frameworks ● purpose of the collections ● usefulness of the collections ● content (drop/include) ● reducing reporting burden ● future development ● actionable options and timelines.	● assess accuracy of reporting ● funding model ● nationally endorsed technical specifications for potential new indicators in the nKPIs ● assess development of Health Data Portal (HDP).

Guiding principles

A series of agreed-upon principles guided the review (Table 1.3). These principles represent what the collections should look like in the future and thus where the recommendations needed to focus.

Based on these guiding principles, five themes for the review were developed—purpose, usefulness, content, reporting burden, and ways forward—along with a series of questions against each of these themes (Table 1.4).

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[3] Responsibility for the PM&C-funded substance use and SEWB-Link Up programs (which were included in the OSR) has now transitioned to the NIAA (created in July 2019). At the time of the review, however, this sat with PM&C.

[4] The NACCHO affiliates are also known by the Department of Health as Sector support organisations or networks, and include the Aboriginal Health and Medical Research Council (AH&MRC, NSW), Aboriginal Health Council of Western Australia (AHCWA), Aboriginal Health Council South Australia, (AHCSA), Aboriginal Medical Services Alliance, NT (AMSANT), Queensland Aboriginal and Islander Health Council (QAIHC), Tasmanian Aboriginal Council (TAC). Victorian Community Controlled Health Organisation (VACCHO), Winnunga Nimmityjah Aboriginal Health and Community Services Ltd (Winnunga, ACT).

Table 1.3: Guiding principles for the review

OSR:	nKPI:
• reporting places minimal burden on health services • where possible, data are generated from existing clinical systems • purpose and use of each module is defined and explained • data provide value to the government and Aboriginal health sector • data provide value at service and program level.	• reporting places minimal burden on health services • where possible, data are generated from existing clinical systems • purpose and use of each indicator is defined • data provide value to the government and Aboriginal health sector • balance between the indicator set being controlled and stable, but also able to evolve over time • data provide value at service and program level • relationship with the OSR is made clear.

Table 1.4: Review themes and questions

Theme	Questions that the review aims to answer
Purpose	1. Is there consistency in how stakeholders and users define the purpose of the nKPIs and OSR as they currently stand? 2. How well do the current collections meet the purposes as defined (that is, are they fit for purpose)? What, specifically, are the issues? 3. Should the purposes be modified, and, if so, how and why?
Usefulness	1. How useful are the current nKPIs and OSR (for example, in terms of supporting current/emerging priorities)? How are the data currently being used? 2. For ISPHCS, how well do these data fit in with other ongoing Quality improvement activities or reporting requirements? 3. Are there ways of increasing the usefulness of the current collections (such as automated output)? How could this be achieved?
Content and timing	1. What are the data needs of the key stakeholder groups? How well does the content of the collections (in terms of the modules/indicators) meet these needs? 2. Are there questions or indicators which are missing and should be added? Are there questions or indicators which could be deleted or modified? Are there changes to current specifications of the indicators which would make them more useful? 3. Are the current timings of the collection (twice a year for nKPIs, once a year for OSR) optimal? If not, how should they be changed?
Respondent burden	1. What is the current reporting burden on individual services? 2. How could this burden be eased for each of the collections?
Future development	1. What are the pros/cons of keeping the nKPI and OSR separate or integrating them? 2. What are the advantages and disadvantages of an indicator collection approach versus a minimum dataset approach? 3. How do the collections fit into developments in broader primary health care data collection, and what implications does this have for the future? 4. What governance structures should be put into place for the data collection, post-review?

1.3 Approach

The AIHW took a conceptually-based and collaborative approach to answering the review questions, based on the National Aboriginal and Torres Strait Islander Health Data Principles (AHMAC 2006).[5] Engagement and wide consultation with stakeholders using three different methods was brought together with the findings from a policy and literature review to identify key issues and potential solutions (Figure 1.1).

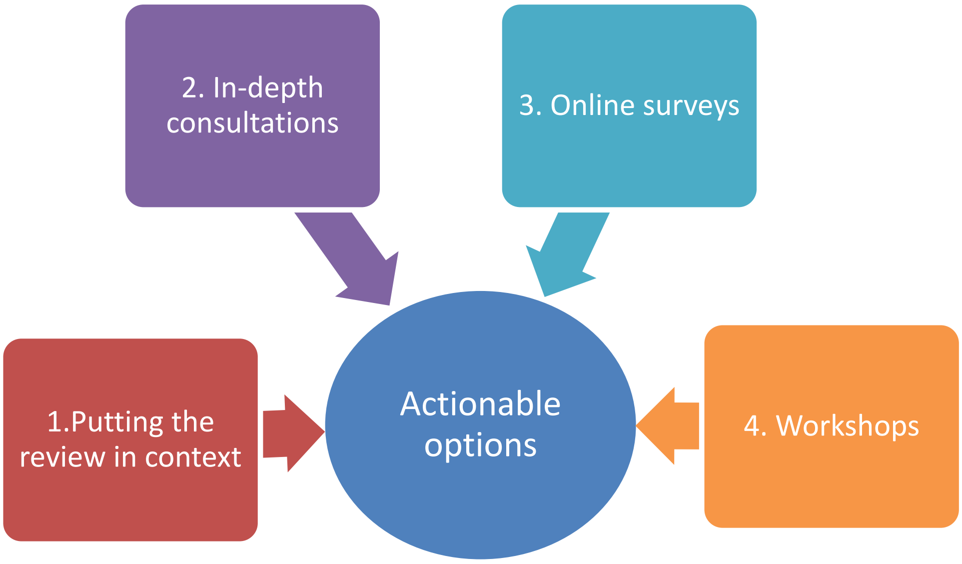

Figure 1.1: The 4 stages of the OSR and nKPI review

A brief overview of these steps is presented below. More details on the individual steps and the stakeholder engagement process can be found in Appendix 1.

Stage 1 set the review in context by focusing on four key areas:

- Indigenous-specific policies
- mainstream data developments
- previous reviews of the OSR and/or nKPIs and current projects relating to the collections
- national and jurisdictional indicator frameworks

This first step provided important background information for the review, highlighted data gaps and potential future data needs, and set the stage for the consultation process.

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[5] For example, Principle 1 states that the management of health-related information about Aboriginal and Torres Strait Islander persons must be ethical, meaningful, and supports improved health and better planning and delivery of services; and Principle 7 states that the collection, collation and utilisation of information should be conducted in the most efficient and effective manner possible and minimise the burden on Aboriginal and Torres Strait Islander people.

The three consultation methods used in Stage 2 included:

- In-depth interviews—these used a semi-structured interview guide to focus on the key themes and questions for the review. Most were conducted face-to-face but some were conducted by telephone/videoconferencing.[6]
- Online surveys (one each for the OSR and nKPIs)—the content of the surveys was determined by both the questions developed for the review and the findings from the in-depth interviews.
- Workshops—at these participants discussed the purpose of the two collections, how to make them more useful, and how to reduce the burden of reporting. The workshops also provided an opportunity to discuss the specifics of each collection, including items to be kept or deleted from the collections and potential ways forward. Importantly, the workshops were conducted after the in-depth interviews and online surveys and provided an opportunity to further discuss and refine findings from the previous forms of consultation.

All organisations reporting to either or both of the collections, the NACCHO affiliates, and the Public Health Medical Officers (PHMO) network were informed about the review directly by email, and were provided with the contact details of the project team and a link to information on the AIHW website. These organisations were offered opportunities for a phone interview, to participate in the two online surveys, and to attend one of the 5 face-to-face one-day workshops held in capital cities across Australia.

The Department identified key contacts for the vendors and departmental staff (see Table 1.1), and helped to facilitate access to staff for meetings and interviews.

Timing of the consultations

The consultation phase of the review took place during and following the July–August 2018 submission period for the 2017–18 OSR and the June 2018 nKPIs (Table 1.5).

Table 1.5: Timing of the consultations in relation to data submission

	July	August	September	October	November	December
June 2018 nKPI data submission through OCHREStreams	🟥	🟥				
2017–18 OSR data submission through OCHREStreams	🟥	🟥				
In-depth interviews including visits to 21 services	🟧	🟧	🟧			
OSR online survey				🟧		
nKPI online survey					🟧	
Workshops					🟧	
HDP development by the Department	🟦	🟦	🟦	🟦 *	🟦 *	🟦 *

* Ongoing advice from the AIHW to the Department on the restructuring of the OSR instrument, the modules to be included, and rewording of items.

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[6] A subset of 20 services were invited to participate in site visits and in-depth interviews with the project team. Selection of services for the site visits was based on ensuring coverage across all remoteness categories, all jurisdictions, types of organisations (single site and multiple site), community controlled and non-community controlled, consortium and stand-alone services, and across all major clinical information systems (CIS). All other services had the opportunity for an in-depth interview by phone.

The feedback received in the consultation phase largely related to issues experienced with submitting data through OCHREStreams. This was prior to the move from OCHREStreams to the HDP for data submission (the first use of the HDP for data submission was for the December 2018 nKPIs which took place in January 2019).

The descriptions in this report of the data collection tools and process, the synthesis of the findings, and the recommendations for moving forward are based on the situation as it existed at the time of the review.

Because the development and building of the HDP for the 2018–19 OSR began while the review was still being conducted, the AIHW provided early draft feedback to the Department in October and November 2018 on every individual item in the OSR and advice on how the instrument could be restructured and redeveloped. A draft report and recommendations were provided to the Department in January 2019.

The Department has already made progress on some of the recommendations. A discussion of these changes can be found in Section 6.

Summary of participation by stakeholders

Engagement with all stakeholders was critical for the review, and it was especially important to hear from those who collect and report the data. In total, representatives from 131 different ISPHCS that report to the nKPIs and/or OSR participated in at least one of the three types of consultations. Participating services represented all governance types (community-controlled, other NGO and government) and remoteness areas (Table 1.6).

Table 1.6: Participation of organisations[(a)], by remoteness[(b)]

	In-depth interviews		OSR survey		nKPI survey		Workshops	
Remoteness	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**
Major cities	7	25.9	15	26.3	19	30.6	15	26.8
Inner regional	5	18.5	12	21.1	14	22.6	12	21.4
Outer regional	4	14.8	18	31.6	21	33.9	14	25.0
Remote	4	14.8	7	12.3	3	4.8	9	16.1
Very remote	7	25.9	5	8.8	5	8.1	6	10.7
Total	**27**	**100**	**57**	**100**	**62**	**100**	**56**	**100**

(a) Each health service/organisation is counted only once under each type of consultation, even if there were multiple participants

(b) Some organisations have headquarters based in one remoteness category (for example, outer regional), but have clinics/services in other remoteness categories as well (for example, remote and very remote). Where participants named the organisation rather than an individual clinic, the remoteness category of the organisation as it currently stands in the OSR was used.

Individuals from health services who participated in the consultations included clinicians (general practitioners, nurses, midwives, Aboriginal health workers/practitioners, allied health professionals), Chief executive officers, continuous quality improvement (CQI) coordinators, clinical service managers and data managers.

Participants also included NACCHO and the NACCHO Affiliates who support the community-controlled ISPHCs, the RACGP, 3 Government Departments (Health, PM&C and AIHW), 2 national committees (HS DAG and NATSIHSC), and 4 software vendors (Communicare, MMEX, Medical Director and Best Practice).

Participation in each type of consultation

Table 1.7 presents a summary of the number of participants in each type of consultation.

Table 1.7: Review participants, by type of consultation

Type of consultation	Number of participants
Interviews	122 individuals (Health services, NACCHO Affiliates, Commonwealth departments, RACGP)
OSR survey	70 respondents
nKPI survey	84 respondents
Workshops	97 individuals (held in Melbourne, Darwin, Sydney, Perth and Brisbane)

The in-depth interviews were held with 122 individuals—81 participants from 27 health services; 19 staff/PHMOs from the eight NACCHO Affiliates; 22 participants from the three Government Departments and the four software vendors (Communicare, MMEX, Medical Director, Best Practice).

A total of 70 OSR surveys were completed by 57 organisations reporting to the OSR, along with 84 nKPI surveys (which included responses from 62 different organisations reporting to the nKPIs).

A total of 97 participants from 56 services, 5 NACCHO Affiliates and the RACGP participated in the workshops.

Written submissions were received from Winnunga Nimmityjah Aboriginal Health and Community Services Ltd in the ACT, and from Aboriginal Medical Services Alliance (AMSANT) in the Northern Territory. These were passed on to the Department, with permission from the providers.

1.4 Analysis and development of recommendations

The results of the literature review and consultations were analysed against each of the five review themes. Importantly, as part of this process, the results from all three consultation methods were considered to ensure that the results did not reflect only the view of a single service or organisation; and similarities and differences within and across stakeholder groups were noted. Specific issues were then highlighted under each of the themes, and potential solutions/options were developed for each issue, where possible, and turned into recommendations. The development of the recommendations also took into account findings from previous reviews, and the AIHW's experience with the OSR, the nKPI and other data collections.[7]

In addition to recommendations for each collection, the analysis identified important issues beyond those of the two collections themselves. These included data development and data governance, the overall amount of reporting (required in addition to that for the OSR and nKPIs), and relationships with vendors.

It is important to note that the recommendations in this report are designed to be a starting point for further discussions. Such discussions must be based around appropriate data development principles and need to consider the implications, impacts and cost of the

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[7] Data quality issues and their implications for interpreting the data are presented in each OSR and nKPI report and data release (for example, *National Key Performance Indicators for Aboriginal and Torres Strait Islander Primary Health Care: Results to June 2018*).

recommendations versus the benefits of changing the collections. Some of the factors to consider during this process include:

- whether the change fills an important gap in knowledge or practice (for example, changing the age range of an indicator to fill a gap in knowledge around young people or the addition of new measures)
- whether the change brings an item in line with clinical guidelines/best practice
- whether the change would represent a complete break in time series (for example, there will be no time series break if the change to an indicator in the nKPIs to bring it in line with clinical guidelines focuses on percentages meeting the clinical guidelines at the time of measurement, as long as these changes are appropriately noted; however, where a change would involve a complete re-specification, there will be a time series break)
- the financial cost of making the change, including the cost of:
  - changing the underlying clinical information system (CIS) processes for each vendor (including the level of difficulty involved)
  - educating staff within the services about the changes
  - training the staff who organise the reporting of the nKPIs every six months and the OSR yearly
  - changes to the HDP, Enterprise Data Warehouse (EDW) and AIHW systems.

2 Overarching key findings

This section discusses high-level themes identified in the review that apply to both the OSR and nKPIs.

2.1 High-level themes

Importance of high quality and meaningful data

All stakeholders in the review recognised the importance of high quality data in the improvement of health services and health outcomes for Aboriginal and Torres Strait Islander Australians at both the service and policy levels.

Individual services stressed that data are used to improve their planning, service delivery, and the health of their clients and communities. They used data in internal CQI processes (including clinical audits), to examine gaps between client needs and services and also to support applications for additional funding or services.

In order to ensure that national data are of high quality, data development processes need to include more input and involvement from ‘on-the-ground’ services and stakeholders to make certain that their views and needs are reflected. Specific recommendations for each collection are provided in Sections 3, 4 and 5.

OSR and nKPIs need to be placed in context

Stakeholders were of the opinion that the OSR and nKPIs represent only part of the work done by the ISPHCS on the ground, and do not fully capture the needs of their clients or the needs of the communities in which they work.

They agreed that each health service that reports to the OSR and nKPIs works in a unique physical environment and social and community context. Local socioeconomic conditions, housing, education, employment and community dynamics affect the health and the health needs of their local populations. For example, rheumatic heart disease, trachoma and skin diseases, and hearing health issues which are impacted by social and environmental factors are more prevalent in remote and tropical areas of Australia. The sector feels strongly that OSR and nKPIs do not capture these contrasting social and environmental determinants.

The AIHW recommends two solutions to address this issue. One solution focuses on ensuring that the data collected by services are relevant to their clients’ needs. The other solution focusses on the availability of regional level data from other sources which can be used both by individual services and government to provide the context that can help interpret the health service data.

One way to ensure the collection of relevant data is to include more open-ended questions and spaces within the OSR for services to discuss the contexts of their clients and their service delivery. These data could then be analysed using thematic analysis techniques.[8,9]

Context to help with the interpretation of health services’ data could come from data in the AIHW’s Indigenous communities—regional insights website (currently under development) to

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[8] Comment boxes are already built into the system for each nKPI.

[9] These are discussed in the recommendations for the restructure of the OSR.

complement the data from the OSR and nKPIs. The website, which is co-funded by the AIHW and the Department, will have data and statistics about Aboriginal and Torres Strait Islander Australians and their health and wellbeing presented at local, regional and national levels. The aim is to provide regional statistics by the Australian Bureau of Statistics' Indigenous Regions for a number of health and related topics (such as socioeconomic indicators) and also by lower levels of geography when the robustness and coverage of the data allow. These data can be used by individual services to further understand their local areas and can also be used to enhance their reporting of data from the OSR and nKPIs.

Improving communication and engagement

Three different issues were identified around communication and engagement:

1. A desire on the part of services for more engagement and feedback around the content of their individual submissions (for example, on what they were doing well or ideas for improvements).
2. A request for more information on how the OSR and nKPIs are used to inform policy at the national level.
3. A request for better communication around the collection and reporting process itself, including:
    - who to contact with questions around all steps in the data pathway—for example, it was noted that prior to the termination of the contract with the Improvement Foundation, there were four different potential helpdesks: one for OCHREStreams, one at the Department and two at the AIHW (one for each collection), and it was not clear to services which one they should contact for different queries
    - where to find detailed practical resources that supported the collections—for example, explanations of how to assign staff to various workforce categories within the OSR)
    - notification of changes to technical specifications, with enough time for services to adjust their practices as well as their systems to be able to report their data more accurately.

Different versions of technical specifications in METeOR (AIHW's Metadata Online Registry) and with the Improvement Foundation (IF) caused difficulties for vendors (and this may contribute to data quality issues for individual organisations). Vendors have reported that the move towards the HDP has led to improved communication with the Department.

Strategies for addressing these issues are included in Section 5 around governance and data development.

Reporting requirements

Another issue identified by stakeholders related to the reporting requirements for individual organisations. The main points were:

- there appears to be a disconnect between what services are funded to do and what they have to report against—for example, there were organisations that only received New

Directions[10] funding but had to report against all indicators in the nKPIs, and OSR workforce and other organisation-level questions

- it is not understood why some organisations report to both the OSR and nKPIs, while some report to only one of the collections
- there is inconsistency with how organisations with multiple clinic sites report to the OSR and nKPIs—for example, some report at an aggregated level for the OSR and a disaggregated level for the nKPIs, some organisations with multiple clinics always report at an aggregated level, while some report at a clinic level
- some stakeholders questioned whether there should be a minimum threshold around funding or the types of services provided which triggers a requirement to report to either the OSR or nKPIs—for example, some organisations reporting to the OSR receive small amounts of IAHP funding to provide services that do not align with any of the existing data collection modules (such as short-term accommodation for those requiring hospital care or brokerage services who do not directly provide services to clients themselves).

These issues were raised by all stakeholder groups and the Department. The most common explanation for the inconsistencies was that they are historical legacies and had been individually negotiated between organisations and contract managers over time. An additional explanation relates to the CIS used by each organisation—for example, Medical Director is unable to report at clinic levels while Communicare and Best Practice are able to.

There was agreement that now is an opportune time to clarify future reporting requirements when the current funding agreements expire on 30 June 2020. Agreements for funding after that time represent an opportunity for addressing these issues and outlining the future reporting scope for each organisation.

Reporting burden

Sections 3 and 4 discuss reporting burden associated with the two collections. However, a broader point made by many stakeholders is that while the OSR and nKPIs have their own reporting burdens, they form only part of a larger reporting requirement to different programs, funders, and different areas within the same funder.

For example, organisations that receive funding from PM&C[11] for standalone substance use services and/or SEWB/Link Up have to complete the OSR as well as 6 monthly PM&C KPIs. However, the PM&C data cannot be simply aggregated and uploaded to the OSR, nor can OSR data be downloaded and entered into the PM&C format.

The main reporting requirement (as distinct from data collection requirements) for organisations receiving IAHP funding are the yearly Action Plans and twelve month performance reports. These are word-based documents not previously submitted through OCHREStreams. Nor will they be submitted through the HDP.

Some organisations have to complete 50 reports a year as different funders require different data. These can include various reports to Primary Health Networks (PHNs), state and territory governments, the Department for other programs (such as the Australian Nurse

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[10] New Directions as a program has now ceased, although organisations will continue to receive maternal and child health funding.

[11] Responsibility for these PM&C programs has now transitioned to the NIAA. However, because the specific modules were known as the PM&C modules at the time the review was conducted, that language has been retained for the purposes of this report. These modules ceased being collected as part of the OSR from the 2018–19 collection onwards, but were included in the OSR at the time the review was conducted.

Family Partnership Program or Tackling Indigenous Smoking), and to other Australian Government Departments (for example, NIAA). Some organisations reported that they had taken staff off their clinical duties to complete reporting requirements.

Participants identified the reporting burden as a critical issue that needs to be managed through better coordination and negotiation of reporting requirements in different areas within the Department as well as across all government departments.

Technical issues: software

A number of health services (and the NACCHO Affiliates) identified issues with the standardisation of their software to comply with national technical specifications. Often data extracted from clinical information systems by different methods (third-party tools vs. internal reports) produced different numbers for the same clients. In addition, issues often arose due to funder requests for extraction changes. Organisations consistently expressed their desire for more centralised coordination by funders of software issue resolution. These concerns may be resolved by recent data quality projects supported by the Department.

The software developers all stated the need for clear requirements and definitions and an agreement on these by all users, before software design begins.

Future data development

All stakeholders taking part in the review expressed the desire for a clearer and more inclusive data development process, recognising that such a process would help ensure that the data collected would have more benefit for everyone.

More detail is provided in Section 5 of this report, but the key elements include:

- involving a range of stakeholders in all aspects (including the purpose, content, collection, submission and reporting of the data) to help ensure that key factors are considered, such as the on-the-ground impacts of changing requirements and the importance of collecting and reporting data that aligns with the needs of both services and policymakers
- using relevant evidence-based guidelines, principles and processes to develop indicators, such as SMART (Specific, Measurable, Attainable, Relevant, and Time-Bound) principles and the Good Indicators Guide (National Health Service Institute for Innovation and Improvement and The Association of Public Health Observatories 2017)
- having a clearly specified data development plan with responsibilities, roles and timelines outlined
- having a clear communication strategy around data development.

It is recommended that the OSR undertake a staged redevelopment with a clear data development plan. It is also crucial that a framework with defined criteria be put in place for the nKPIs around the review of each of the 24 current indicators and the assessment of any potential new indicators. The recommendations in this report provide a starting point for framing these discussions.

While the OSR and nKPIs will remain as separate entities, after the data for each collection are finalised, they can be combined into one dataset (at the organisation level). This combined dataset can be used for analysis and reporting.

Additional items collected through other mechanisms could also be added to the integrated dataset, including contextual data from the AIHW's Indigenous communities—regional insights website or information from the Action Plans the services report as part of the IAHP funding.

Governance arrangements

Ensuring that the issues identified in this review are addressed requires changes to the current governance arrangements of the two collections (discussed in more detail in Section 5). In short, the proposed model brings the governance and oversight of the collections into a single body with greater representation from reporting organisations. Such a structure would benefit all stakeholder groups, reduce reporting burden and ensure that what is collected is meaningful and has value at the service and policy levels.

3 Synthesis and recommendations—OSR

This section presents an overview of the OSR collection and the findings, followed by the findings and recommendations for the collection against the five review themes. Some recommendations address issues that overlap with more than one of the themes—for example, increasing the usefulness of the collection means making changes to the content. In these cases of overlap, recommendations are made once only and then referred to again where applicable.

3.1 Collection overview

The OSR is a national data collection focused on the characteristics of, and activities and services provided by, organisations who receive funding from the Australian Government to deliver one (or a combination) of health services to Aboriginal and Torres Strait Islander people. At the time of the review, these were:

- comprehensive primary care health services
- maternal and child health services
- social and emotional wellbeing (SEWB) or Link-Up counselling services[12]
- standalone substance use services[13].

The OSR contains information on all services provided by organisations receiving funding, not just those attributable to that funding stream (with the exception of the PM&C modules where the data relates specifically to activities funded under those programs).

More information on the collection itself, including its history, can be found in Appendix 2.

Purpose

The initial OSR had five purposes—the data were to be used to:

- profile the work of the Department funded health services
- satisfy government accountability requirements related to the activities of services
- identify key issues affecting Indigenous primary health care services
- identify gaps in Aboriginal and Torres Strait Islander services
- inform various publications and national reporting, such as national Aboriginal and Torres Strait Islander health performance reporting, Council of Australian Governments (COAG) reporting, and Departmental annual reports (Lewis 2011).

Reporting organisations

In July 2018, 266 organisations submitted OSR data, covering the period 1 July 2017–30 June 2018 (Table 3.1). Nearly three-quarters (74%) of reporting organisations were funded for primary health care services. The other 26% were funded for one (or a combination of) maternal and child health (MCH) services, social and emotional wellbeing

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[12] These refer to distinct funding programs at the time by PM&C. Most organisations provided social and emotional wellbeing services as part of their comprehensive primary health care.

[13] This refers to a distinct funding programs at the time by PM&C. Most organisations provided substance use services as part of their comprehensive primary health care.

(SEWB) services/Link Up, and/or standalone substance use services. Table 3.1 also shows that a number of organisations funded for primary health care also received funding for SEWB and standalone substance use services.

Table 3.1: Overview of organisations reporting to the OSR, 2017–18

Indigenous health services	Organisations funded for primary health care	Organisations with other funding	Total organisations
Primary health care	198	—	198
Maternal and child health services	198	19	217
Social and emotional wellbeing	72	13	85
Standalone substance use	40	39	79
Total organisations	**198**	**68**	**266**

Source: AIHW analysis of OSR data.

Of the 198 organisations that submitted data to the primary health care collection, 140 were Aboriginal Community Controlled Services, 48 were government-run services, and 10 were run by other NGOs (Table 3.2).

Table 3.2: Governance structure of organisations reporting to the OSR, by state and territory, 2017–18

	Governance structure			
Jurisdiction	ACCHO	Government	Other, non-government	Total
NSW/ACT	38	1	3	42
Vic	22	2	—	24
Qld	26	2	1	29
WA	17	4	5	26
SA	11	3	—	14
Tas	6	—	1	7
NT	20	36	—	56
Total	**140**	**48**	**10**	**198**

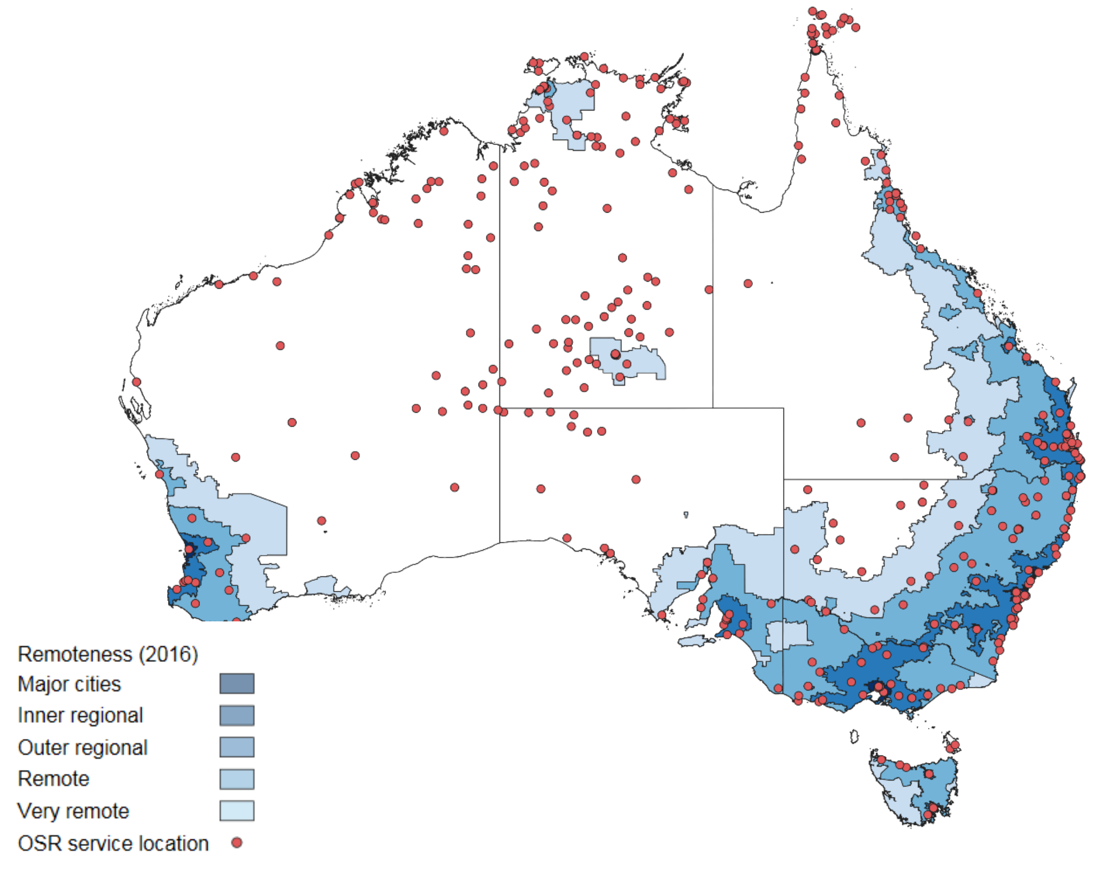
Source: AIHW analysis of OSR data.

The 198 primary health reporting organisations are distributed throughout all states and territories and remoteness categories, as illustrated in Table 3.3 and Figure 3.1. Forty-five percent of the organisations were based in *Remote* or *Very Remote* areas.

Table 3.3: Distribution of organisations reporting to the OSR, by state and territory and remoteness, 2017–18

State and territory	Remoteness					Total
	Major cities	Inner regional	Outer regional	Remote	Very remote	
NSW/ACT	9	17	11	4	1	42
Vic	4	10	10	—	—	24
Qld	5	7	11	3	3	29
WA	4	2	4	7	9	26
SA	1	2	5	1	5	14
Tas	—	2	3	—	2	7
NT	—	—	1	11	44	56
Total	**23**	**40**	**45**	**26**	**64**	**198**

Source: AIHW analysis of OSR data.



Source: AIHW analysis of OSR data.

Figure 3.1: Site locations of organisations reporting to the OSR by remoteness, 2017–18

Modules

The 2017–18 OSR had a module-based structure, where all reporting organisations completed a minimum core set of modules and some organisations completed additional modules related to specific funding (Table 3.4). The individual OSR items are a mix of counts of activities/services provided (such as number of clients seen, episodes of care, number of specific health promotion groups), workforce, questions with tick box answers and some text responses.

Organisations' funding agreements/contracts with the Department require them to report to the OSR. The funding agreements also determine which modules within the OSR the organisation reports against (for example, whether they complete the clinical services, SEWB or Link Up or substance use modules).

Table 3.4: 2017–18 OSR modules by reporting requirements

Module	Reported by all	Only by a subset
Organisation profile (includes details of service sites)	X	
Clinical services (episodes of care, client contacts, MBS items, specialist and allied health services, SEWB issues and services, Substance use issues and services, Maternal and child health)		X
Social and emotional wellbeing (SEWB) program (PM&C)		X
Link Up (PM&C)		X
Standalone Substance Use (PM&C)		X
Registered Training Organisation (PM&C)		X
Health promotion (types and number of groups)	X	
Corporate services/infrastructure (includes workforce)	X	
Advocacy, knowledge and research, policy and planning	X	
Community engagement, control and cultural safety	X	
Finalise for approval (includes service gaps and challenges)	X	
CEO approve and submit	X	

Types of data required

Organisations reporting to the primary health care modules of the OSR require five main types of data.[14] The data types do not align exactly with the individual modules. For example, the clinical services module requires data drawn from the organisation's CIS, as well as counts of group activities, factual information (whether an organisation offers a particular type of service) and subjective information (substance use issues).

Numerical data from client information systems (CIS)

Numerical information on the number of clients, the number of client contacts, episodes of care, MBS items, mothers attending antenatal appointments and antenatal visits are generally drawn from the organisation's CIS. There are five main systems used by reporting organisations: MMEx, Medical Director, Best Practice, Communicare, plus PCIS used by the Northern Territory Government (NTG) services. Except for MMEx and PCIS, there are also

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[14] The PM&C modules required additional data, which are not discussed here.

various versions of each CIS still in use. The choice of CIS is a business decision made by individual health services.

Communicare, Medical Director, Best Practice and MMEx have built-in reporting tools to extract clinical information such as client numbers, episodes of care and client contacts data for the OSR. Services are able to change their extracted data before submitting it. Not all reporting organisations use one of these systems, however. In the July 2018 collection, 61 of the 198 organisations reported manually to the clinical services module.

Counts of group activities

Services are required to report the number of groups/activities they run (such as health promotion groups/activities and the number of maternal and child health groups/activities). These data are generally not integrated into an organisation's CIS, but are gathered from other record keeping tools.

Workforce data

The information on full-time equivalent (FTE) staff and Indigenous status of the workforce (both employed and visiting staff) often comes from Human Resources or accounting systems and is then re-coded into the OSR categories.

Factual information

Factual information such as accreditation, hours that services operate, cultural safety, whether various types of services are offered/facilitated are generally available from administrative systems within each organisation.

Subjective information

The OSR does not record how subjective information on service delivery (such as SEWB and substance use issues, service gaps and challenges) is determined.

3.2 Findings and recommendations by theme

Purpose

The review found that over time, as the OSR evolved and content was added, its purpose became less clear.

The review participants saw a variety of purposes for the OSR:[15]

- to describe the organisation receiving funding (who they are, what they do, who works there)
- to count the number and types of services delivered (activity reporting)
- to assess whether the government is spending its money wisely (accountability)
- to measure the compliance of individual services (whether they are doing what they said they would do)
- provide context for the nKPIs

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[15] It is important to note that these are participants' understandings of the purpose—they were not necessarily suggesting that these are what the purpose(s) should be.

- see where more investment is needed
- provide national level information on the sector
- provide data needed for the Department's proposed funding model.

Some participants were unable to attribute a specific purpose to the collection.

There are several reasons behind this confusion, including:

- the name (Online Services Report) reflects the method of submission, and does not provide any information about the collection itself
- multiple purposes of the OSR leads to less clarity about overall purpose
- a lack of knowledge about how the OSR data are used beyond national reporting.

Among the perceived purposes discussed, the two most consistently cited by participants in all three methods of consultation were that the purpose of the OSR is to:

- provide accountability to the funders
- describe the activities of the funded services.

However, issues were raised around the suitability of the OSR to meet these purposes because it collects data on all activities of the funded organisations, regardless of the percentage of those activities funded by IAHP. Concerns were also raised about whether the OSR questions accurately describe the activities of the organisations (that is, how they work).

Participants reported that they thought the purpose of the OSR **should** be to identify service gaps and challenges, to inform policy, and to highlight the work of the funded organisations. The following recommendations address the issues identified in this section.

Recommendations: Purpose		
1.	Clearly articulate the purpose of the OSR and obtain relevant stakeholder endorsement:	
	1a.	The OSR is a data collection reported by organisations funded by the Department to provide Indigenous-specific primary health services. The purpose is to: a) Profile the Department-funded services b) Satisfy government accountability requirements[16] c) Identify service gaps and challenges within Aboriginal and Torres Strait Islander health services d) Identify key issues affecting Indigenous health services
2.	Rename the OSR to better reflect its purpose	
	2a.	Potential titles are: Indigenous Health Services Profile (IHSP), Indigenous Services and Activity Report (I-SPAR). If the letters OSR are to be retained, a descriptor could be put in front and the acronym changed, for example, Indigenous specific primary health services Organisational Services Report (ISPHS OSR)
3.	Notify key stakeholders when OSR data are used in research and/or policy	
	3a.	AIHW to notify Department when OSR data are used in national reporting (for example, Australia's Health, HPF, Access to services projects).
	3b.	Department to notify stakeholders about AIHW's use of the data as well as their own internal use. Stakeholders include reporting organisations, NACCHO and the NACCHO Affiliates, HS DAG

Recommendation 1 clarifies the OSR's purpose. This recommendation was developed during the first workshop and tested across additional workshops. It also aligns with the survey findings.

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[16] This purpose focuses on national level accountability for IAHP funding—its focus is not on the accountability of individual organisations for the purposes of contracting.

Recommendation 2 is to rename the collection. This recommendation also received universal support throughout the review. Potential names were suggested during the workshops.

Recommendation 3 focuses on communicating how OSR data are used in practice.

Usefulness

The review examined three aspects of usefulness: how OSR data are currently used, whether data can be used for other reporting requirements, and how to increase the usefulness of the data.

The extent and type of OSR data used varied by stakeholder group:

- Some services and the NACCHO Affiliates reported that the OSR data was not widely used for their own purposes.[17] The aspects that were used most often related to activity reporting (such as client numbers and client contacts) and reports to their boards.

  The factors that limit the usefulness of the OSR include the mismatch between the OSR and their other reporting requirements (including additional reporting for the IAHP funding and for accreditation), the inability to directly output the OSR data they submit in a useable format, the view that the content does not capture key aspects of how the ISPHCS work on the ground[18] or identify gaps and challenges well, and concerns over data quality. They reported that the AIHW service-level reports would be more useful if they provided more context around their OSR data.

  Services and the NACCHO Affiliates would like to see the OSR used more for policy development in the future. For this to occur, information on service gaps and challenges need to be of higher quality.
- The Department reported that the following data were the most useful: episodes of care, client contacts, client numbers, staffing, service information (for example, opening hours, accreditation status, governance, and service delivery sites), which they used for internal processes and responses to ministerial requests.
- For PM&C, the substance use and SEWB/LinkUp modules in the OSR provided a ‘complementary set of data’ to their own KPIs and they found the national report useful for providing more detailed information at a national level on the services they funded.
- The AIHW uses OSR data to develop service-level and national reports, to report against national indicator frameworks (such as the HPF (AIHW 2017a)) and uses the information on site locations and types of services to analyse spatial accessibility and identify service gaps.

On the whole, there appears to be a mismatch between the amount of effort required to set up the reporting process, the time and effort required to source, clean, aggregate and report data to the OSR, and the usefulness of the data to the providers.

Below are five recommendations to increase the usefulness of the OSR for the stakeholder groups. They include recommendations around the individual items that are included in the data (ensuring they are useful) and around how the data can be used once they are collected (‘report once, use often’). The recommendations around the content of the OSR in the next

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[17] Of the OSR survey respondents, 59% of the survey respondents said they used some OSR data, 44% used the service-level reports and 36% used the national report.

[18] This includes working in multidisciplinary teams, the amount of time staff spend building relationships with clients, and the longer consultation times compared with mainstream general practice.

section should also help improve the collections' usefulness, but they need to be considered within a data development process.

Recommendations: Usefulness[19]	
4.	Align individual items with other reporting requirements in the IAHP contracts so that data can be collected once and reported multiple times.
5.	Build HDP functionality so that services are able to output their own data in a useable format (for example, Excel or Word).
6.	Redevelop the gaps and challenges questions to better capture this information by aligning them with key sections (such as workforce or social determinants) and provide opportunities for services to describe and rank the gaps and challenges.
7.	Continue to monitor and address data quality issues around key data items (for example, episodes of care). A key part of this is comparing mapping documents against agreed definitions to ensure that data entered, extracted and reported are based on the agreed definition.
8.	Review the format of the service-level reports periodically in consultation with key stakeholders to optimise their relevance. Future development may include adding contextual information from AIHW's Indigenous communities—regional insights website and adding the nKPI data (for services who report both).

Content

All stakeholders said that the content and structure of the OSR needed to be reviewed and revised in order to make the collection more meaningful and less burdensome. The current OSR can be characterised as 'broad-brush'—with only some information collected on a wide range of topics.

At the time of the review, the OSR was three collections in one (a primary health collection, a SEWB/Link Up collection and a standalone substance use service collection). Some organisations are only in-scope for one of these collections (for example, substance use) and others are in-scope for all three.

The findings around the content included:

- the OSR should better reflect the work of the reporting organisations, including more meaningful data on activities and services, client characteristics, community engagement, cultural safety, and service gaps and challenges—in other words, it should better reflect comprehensive primary health care[20,21]
- concerns around the ability of the CIS and extraction tools to accurately report on episodes of care
- lack of clarity around what the workforce section is trying to capture (whether it is the qualifications of staff or their roles in service provision)
- the lack of open-ended questions to discuss strengths, needs and to highlight what the organisations do well.

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[19] Issues relating to content are addressed in the next sub-section of the report.

[20] The AIHW provided the Department with feedback on each individual item in the OSR separately.

[21] Such as the core functions of primary care which were first described in the AMSANT Core Functions of Primary Health Care document, 2011. NACCHO has been funded by the Department to develop a Core Services and Outcomes Framework' with an expected release date of May 2020.

In terms of the structure of the OSR, two main issues were identified:

- the instrument is poorly structured, with related items scattered throughout, and a flow that is not logical
- there was near-universal support for the removal of the PM&C modules from the OSR (to make it a primary health care focused collection) and the integration of key questions on social and emotional wellbeing and drug and alcohol issues and services into the main questionnaire for reporting by all services.

Recommendations around the structure and content of the OSR are presented below and in Section 3.3.[22] These recommendations received general support throughout the review process. The exception was recommendation 11b. Recommendation 11b was intended to capture more meaningful client information by providing more detailed information on client characteristics. It was suggested and received general support at the workshops. However, issues have subsequently been raised about the extent to which it is necessary, how it would be used and how resource intensive it would be to develop. As such, this recommendation requires further discussion.

Recommendations: Content		
9.	Remove the three separate PM&C modules (SEWB, substance use and link-up services) from the OSR and integrate relevant SEWB/substance use data items into a more streamlined form within the PHC data module which already covers some of these areas.	
10.	Restructure the OSR into 5 topic areas (organisational profile[23]; site details and services provided; activity reporting (which includes client characteristics); workforce; gaps, challenges and achievements).[24]	
11.	Streamline and redevelop the content within each topic area:	
	11a.	Identify the key items that services will be required to report for the IAHP funding and assess the extent to which they could be collected in the OSR (for example, report once, use often).
	11b.	Consider the option of developing more detailed client-level information that could be drawn from CIS in the future, including data on the number of clients presenting with particular health and wellbeing issues.
	11c.	Redevelop the cultural safety questions to better reflect key principles and processes at the organisational level.
	11d.	Add more open-ended questions to discuss strengths, needs and to highlight what the organisations do well.[25]
	11e.	Redevelop the workforce categories and the instructions on how to report them.
12.	Redesign the instrument so that all related items are ordered logically in the same section.	

The redevelopment of questions and/or responses may lead to a break in series.[26] As some items are linked, changes in one item (for example, workforce) would require changes in

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[22] The Department asked the AIHW to provide a potential future OSR structure (based on the 2017–18 collection) in a questionnaire format which flagged which questions would require redevelopment and to offer some initial options for wording changes. The purpose of this was to assist in developing the content of the first OSR to be collected through the HDP (the 2018–19 collection for which data submission commenced in July 2019). This was delivered to the Department in late 2018, colour coded by an estimated level of data development required. It was also provided to the members of HS DAG in September 2019 for their information.

[23] Organisational profile would incorporate items around advocacy, knowledge and research, policy and planning, community engagement, control and cultural safety which had previously been in separate sections.

[24] This structure was presented and supported at all the workshops.

[25] Reporting it in the OSR, rather than in an individual activity report, would allow it to be analysed at a national level and would align with one of the recommended purposes of the dataset.

[26] There is already a break in series as the staged redevelopment has begun and the 2018–19 OSR only collected a small subset of items. However, as some of the potential redevelopment focuses on those items as well (for example, workforce categories), the cost of making these changes needs to be balanced against the benefit. For the non-numeric items, the break in series can be seen as a ‘reset’ and represents an opportunity to better align the OSR with the work of the reporting organisations.

another item (for example, client contacts). Where these items are drawn from CIS, the setup of CIS, extraction tools and the HDP would need adjustment. It should be noted, however, that as a result of the staged redevelopment of the OSR there is already a break in the series for a number of items.

Reporting burden

There is general agreement that the reporting burden of the OSR is high and the current template long and difficult to use—only 5 to 9 questions out of around 130 can be extracted from a service's CIS, and some services still manually submit all their data or add it to extracted data. Issues remain around some questions' scope and the definitions and counting rules (especially for episodes of care, client contacts and workforce). Other reporting burden issues include:

- the volume of total reporting required of services (not just for IAHP, but for all funding sources)—some of which are similar to, but not exactly the same as, the OSR
- replication between sections of the instrument
- having to extract data from numerous systems
- ongoing problems with the CIS and extraction tools—services reported getting different results from different extraction tools, leading to concerns over the accuracy of the data; and also noted that seeking help from the vendors and making required changes is time consuming
- the responses to a number of questions don't change from year to year, yet services have to re-enter these every year.

Within the OSR, workforce, client contacts and episodes of care caused the highest levels of burden for the services.

A number of recommendations for reducing the reporting burden of the OSR, related to the data collection process and the data reporting process, are made below. Restructuring the instrument and aligning it with other reporting requirements should also reduce reporting burden (as in the previous content section).

Recommendations: Reporting burden	
13.	Detailed (user-friendly) supporting materials for the OSR should be available in one location, with a centralised point of contact for asking questions. This includes providing a printable copy of the instrument well in advance of the collection.
14.	Prepopulate, as much as possible, relevant data items from the previous submission.
15.	Build the HDP functionality in such a way that only those sections relevant to an organisation will be visible to them.
16.	Build the HDP functionality for services to input information in a days per week/month format for the workforce, with a calculator that converts them into FTEs.
17.	Build AIHW data validation rules into the HDP.
18.	Work with vendors to provide a drill down function in the OSR extracts to assist services in identifying and investigating inconsistencies.

Future development

The review has clearly identified the need for a redeveloped and streamlined OSR. Increased involvement of key stakeholders in its design, particularly the front line services who collect and provide the data, would be particularly beneficial.

As noted during the review by services, the NACCHO Affiliates, the Department and the vendors, adequate time needs to be given for any changes to be tested, communicated, and then implemented.

There was also general (but not universal) support for additional information to be drawn from services' CIS. However, it is important to note that considerable time and effort would be required to set up these processes to ensure that clinicians and staff members enter information correctly, and that extraction tools provide accurate results.

Stakeholders were also generally supportive of a move towards ensuring that the content in the OSR provide context around the nKPIs as well.

Below are the recommendations for the future development of the OSR.

Recommendations: Future development	
19.	Increase the involvement of reporting services and the NACCHO Affiliates/ in reviewing and revising the OSR.
20.	The future development of the OSR should move forward using a staged approach.
21.	Work should begin towards a single Indigenous-specific primary health dataset for analysis and reporting which combines organisation level data from the OSR with the nKPIs.[27]

3.3 Implementing the recommendations

Table 3.5 summarises the OSR recommendations outlined in earlier sections. In order for these recommendations to be implemented effectively, appropriate data governance and structured mechanisms for stakeholder input need to be established. To that end, it is recommended that:

- HS DAG have high-level oversight of the collection, with membership expanded to include more representation from services. This will ensure a wide range of views are being considered in the redevelopment of the OSR.
- Targeted task-specific working groups should be formed, as needed, to progress the redevelopment of the OSR. For example, one group could focus on redeveloping the workforce categories, while another could focus on the clinical activities area. Membership of these groups should include on-the-ground staff from services directly involved in the collection of the data, as well as representation from the NACCHO Affiliates, the Department, the AIHW and the vendors.

  Those involved in developing the reporting requirements for IAHP and other Departmental programs should also be included. This would help reduce reporting burden and ensure that data collected in the OSR meet additional reporting agreements for Government. It is recommended that task-specific working groups meet face-to-face in workshop environments if possible to maximise effectiveness and timeliness.
- Communication around who to contact/where information is stored be improved so that the relevant roles and responsibilities of the helpdesks are clearly communicated to the services (and the vendors).

In addition, the AIHW recommends that realistic timeframes be put in place for embedding the redeveloped OSR in practice to ensure that services are adequately supported to develop the necessary processes for collecting/collating the data.

A detailed process for implementing these recommendations is presented in Section 5.

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[27] It is important to note that this refers to an organisational level dataset, not a unit-record file.

Table 3.5: Summary of recommendations for the OSR

Recommendations: Purpose	
1.	Clearly articulate the purpose of the OSR and obtain relevant stakeholder endorsement:
1a.	The OSR is a data collection reported by organisations funded by the Department to provide Indigenous-specific primary health services. The purpose is to: a) profile the Department-funded services b) satisfy government accountability requirements c) identify service gaps and challenges within Aboriginal and Torres Strait Islander health services d) identify key issues affecting Indigenous health services.
2.	Rename the OSR to better reflect its purpose:
2a.	Potential titles are: Indigenous Health Services Profile (IHSP), Indigenous Services and Activity Report (I-SPAR). If the letters OSR are to be retained, a descriptor could be put in front and the acronym changed, for example, Indigenous specific primary health services Organisational Services Report (ISPHS OSR).
3.	Notify key stakeholders when OSR data are used in research and/or policy:
3a.	AIHW to notify Department when OSR data are used in national reporting (for example, Australia's Health, HPF, Access to services projects).
3b.	Department to notify stakeholders about AIHW's use of the data as well as their own internal use. Stakeholders include reporting organisations, NACCHO and the NACCHO Affiliates, HS DAG.
Recommendations: Usefulness	
4.	Align individual items with other reporting requirements in the IAHP contracts so that data can be collected once and reported multiple times.
5.	Build HDP functionality so that services are able to output their own data in a useable format (for example, Excel or Word).
6.	Redevelop the gaps and challenges questions to better capture this information by aligning them with key sections (such as workforce or social determinants) and providing opportunities for services to describe and rank the gaps and challenges.
7.	Continue to monitor and address data quality issues around key data items (for example, episodes of care). A key part of this is comparing mapping documents against agreed definitions to ensure that data entered, extracted and reported are based on the agreed definition.
8.	Review the format of the service-level reports periodically in consultation with key stakeholders to optimise their relevance. Future development may include adding contextual information from AIHW's Indigenous communities—regional insights website and adding the nKPI data (for services who report both).

(continued)

Table 3.5: Summary of recommendations for the OSR (continued)

Recommendations: Content	
9.	Remove the three separate PM&C modules (SEWB, substance use and link-up services) from the OSR and integrate relevant SEWB/substance use data items into a more streamlined form within the PHC data module which already covers some of these areas.
10.	Restructure the OSR into 5 topic areas (organisational profile[28]; site details and services provided; activity reporting; workforce; gaps, challenges and achievements).
11.	Streamline and redevelop the content within each topic area:
11a.	Identify the key items that services will be required to report for the IAHP funding and assess the extent to which they could be collected in the OSR.
11b.	Consider developing more detailed client-level information that could be drawn from CIS in the future, including data on the number of clients presenting with particular health and wellbeing issues.
11c.	Redevelop the cultural safety questions to better reflect key principles and processes at the organisational level.
11d.	Add more open-ended questions to discuss strengths, needs and to highlight what the organisations do well.
11e.	Redevelop the workforce categories and the instructions around how to report them.
12.	Redesign the instrument so that all related items are ordered logically in the same section.
Recommendations: Reporting burden	
13.	Detailed (user-friendly) supporting materials for the OSR should be available in one location, with a centralised point of contact for asking questions. This includes providing a printable copy of the instrument well in advance of the collection.
14.	Prepopulate, as much as possible, relevant data items from the previous submission.
15.	Build the HDP functionality in such a way that only those sections relevant to an organisation will be visible to them.
16.	Build the HDP functionality for services to input information in a days per week/month format for the workforce, with a calculator that converts them into FTEs.
17.	Build AIHW data validation rules into the HDP.
18.	Work with vendors to provide a drill down function in the OSR extracts to assist services in identifying and investigating inconsistencies.
Recommendations: Future development	
19.	Increase the involvement of reporting services and the NACCHO Affiliates in reviewing and revising the OSR.
20.	The future development of the OSR should move forward using a staged approach.
21.	Work should begin towards a single Indigenous-specific primary health dataset for analysis and reporting which combines organisation level data from the OSR with the nKPIs.

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[28] Organisational profile would incorporate items around advocacy, knowledge and research, policy and planning, community engagement, control and cultural safety which had previously been in separate sections.

4 Synthesis and recommendations—nKPIs

This section presents an overview of the nKPI collection, followed by the findings and recommendations for the collection against the five review themes.

4.1 Collection overview

The nKPIs is a data collection of 24 indicators that provides information on process-of-care (15 indicators) and health outcomes (9 indicators) for Aboriginal and Torres Strait Islander regular clients[29] by organisations receiving IAHP funding.

More information on the collection itself, including its history, can be found in appendices 3 and 4.

Purpose

The stated purpose of the nKPIs is that it is ‘intended to:

- indicate the major health issues pertaining to a Primary Health Care (PHC) organisation’s client population (especially those of maternal health, early childhood and the detection and prevention of chronic diseases)
- outline the extent to which government funded Indigenous-specific PHC organisations collect, record and review pertinent data on these issues
- reveal changes in health risks or outcomes that may be driven by the quality of care that government funded Indigenous-specific PHC provide to their clients’.[30]

Reporting organisations

The number of organisations reporting to the nKPIs differs for each reporting period. For the June 2018 collection, 233 organisations submitted data. The distribution of the organisations by remoteness is shown in Table 4.1 and the locations are mapped in Figure 4.1.

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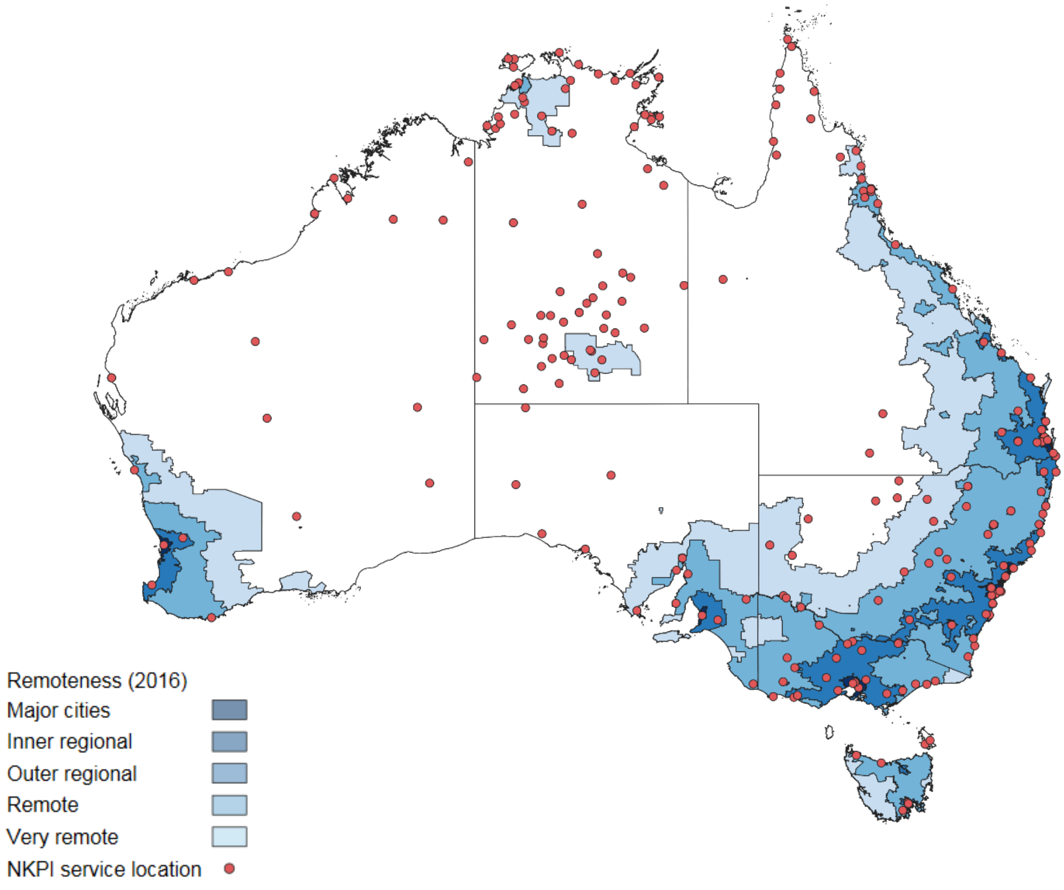
[29] A regular client is defined as one who has made three visits (contacts) within two years. This definition has proven contentious because it does not control for whether the client resides within a service’s catchment area and whether the client sees the service as their regular source of primary care.

[30] From *Identifying and definitional attributes, Indigenous primary health care key performance indicators* in METeOR (https://meteor.aihw.gov.au/content/index.phtml/itemId/687913).

Table 4.1: Distribution of organisations reporting to the nKPIs, by state and territory and remoteness, June 2018

State and territory	Major cities	Inner regional	Outer regional	Remote	Very remote	Total
	Remoteness					
NSW/ACT	13	23	13	4	3	56
Vic	5	10	10	—	. .	25
Qld	6	7	9	6	10	38
WA	1	1	5	6	7	20
SA	1	2	7	1	5	16
Tas	. .	2	3	—	2	7
NT	. .	. .	1	14	56	71
Total	**26**	**45**	**48**	**31**	**83**	**233**

Source: AIHW analysis of nKPI data.



Source: AIHW analysis of nKPI data.

Figure 4.1: Site locations of organisations reporting to the nKPIs by remoteness, June 2018

Content

The 24 indicators can be divided into three substantive areas: maternal and child health, preventative care, and chronic disease management. The 24 indicators and their descriptions are presented in Appendix 4. These indicators cover some of the key focus areas for achieving the objectives of closing the gap in life expectancy between Indigenous and non-Indigenous Australians by 2031.

The maternal and child health indicators include four process indicators and two outcome indicators. The indicators focus on birthweight, antenatal care, maternal smoking and childhood immunisation (Table 4.2).

Table 4.2: Maternal and child health (4 process-of-care indicators; 2 health outcome indicators)

Process-of-care indicators	**Health outcome indicators**
PI13 Antenatal visit before 13 weeks PI01 Birthweight recorded PI04 Child immunisation PI03 MBS health assessment—aged 0–4	PI02 Birthweight result—low PI11 Smoking status of females who gave birth in the previous 12 months

The preventative health measures include six process-of-care indicators and four outcome indicators. The measures cover smoking, alcohol consumption, body mass index, health checks, cardiovascular disease (CVD) risk assessment and adult immunisation (Table 4.3).

Table 4.3: Preventative health (6 process-of-care indicators; 4 health outcome indicators)

Process-of-care indicators	**Health outcome indicators**
PI09 Smoking status recorded PI16 Alcohol consumption recorded PI03 MBS health assessment for adults aged 25 and over PI20 CVD risk assessment PI22 Cervical screening PI14 Immunisation against influenza for clients aged 50 and over	PI10 Smoking status result PI12 Body mass index (BMI) classified as overweight or obese PI17 AUDIT-C result PI21 CVD risk assessment result

The chronic disease indicators include six process-of-care indicators and three health outcome indicators. The indicators include GP management plans (GPMP) and Team care arrangements (TCA), blood pressure and HbA1c (glycosylated haemoglobin) for clients with Type 2 diabetes, kidney function tests and adult immunisation.

Table 4.4: Chronic disease management (6 process-of-care indicators; 3 health outcome indicators)

Process-of-care indicators	**Health outcome indicators**
PI07 General Practitioner Management Plan PI08 Team Care Arrangement PI23 Blood pressure recorded PI05 HbA1c result recorded PI18 Kidney function test recorded PI15 Immunised against influenza	PI24 Blood pressure result PI06 HbA1c result PI19 Kidney function test result

Data collection and reporting

Until May 2015, nKPI data were extracted from health organisations' CISs, largely by a single tool, PenCAT. Because this tool was compatible only with Medical Director, Best Practice, PractiX, Communicare, and a version of Medinet some organisations had to submit their data manually. Organisations using MMEx software submitted data directly to OCHREStreams.

For the June 2017 collection, the Department introduced a new direct load reporting process, which allowed Communicare, Medical Director, and PCIS (NT services) clinical software systems to generate nKPI data within their clinical system and transmit these directly to the OCHREStreams portal.

As Best Practice did not have an in-built extraction program at that time,[31] Best Practice organisations were provided with the IF/Telstra Health tool Elicio to extract and transform their data, and then send to OCHREStreams. Some Best Practice organisations used an SQL script, developed by the Improvement Foundation, in conjunction with the manual submission form to submit data. While MMEx has always been a direct load process, some changes were also made to the MMEx extraction process as a result of the Data Validation Project led by Doll Martin Associates.

In the June 2018 collection, 86 reporting organisations used Communicare, followed by PCIS, Medical Director, and Best Practice, while 12% of reporting organisations submitted manually and 4% used MMEX (Table 4.5).

Table 4.5: Distribution of CIS among organisations reporting to the nKPIs, June 2018

	Number of reporting organisations	Proportion of reporting organisations	Known versions in use
Communicare	86	37%	9
PCIS	51	22%	n.a.
Medical Director	31	13%	3
Other—manual	28	12%	n.a.
Best Practice	27	12%	unknown
MMEX	10	4%	n.a.
Total	233	100%	. .

Source: AIHW analysis of nKPI data.

The transition from OCHREStreams to the HDP (January 2019 collection) and the end of the Improvement Foundation's role in the collection represents a significant change for the nKPIs. This change also provides opportunities for improving all processes around the collection, including in the reporting and usefulness of the data.

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[31] From December 2018, Best Practice has had direct load capability.

4.2 Findings and recommendations by theme

Purpose

The review participants cited a number of perceived purposes for the nKPIs, including:

- informing policy at the national and state/territory level
- supporting the CQI activities of services
- monitoring the effectiveness of health services' programs
- informing how service activities relate to the COAG Closing the Gap targets
- providing accountability to funders
- for national reporting
- measuring the performance of individual services.

While there was relative consistency in this list of purposes, there was not universal support for all those objectives, and there is a disconnect between them and the purposes listed on METeOR.

An additional issue raised by stakeholders, particularly those from the services and the NACCHO Affiliates, was whether the purpose of the nKPIs was to report on what was happening at the health services or whether they were trying to drive particular sorts of clinical care (with the understanding that 'what is reported on is what is done').

There was also a lack of understanding of how data from the collection are used by government to help drive policy.

When asked what the purpose of the collection *should* be, there was not a lot of variation from the above, though there was slightly less support for the last three points regarding accountability, reporting and performance from health services and affiliates. Nevertheless, these were still seen as important functions from the perspective of Government.

It is important that the purpose of the collection be reviewed and clarified. To that end, the following recommendations are made:

Recommendations: Purpose		
1.	Clearly articulate the purpose of the nKPIs and obtain relevant stakeholder endorsement:	
	1a.	The purpose of the nKPIs is to improve the delivery of primary health care services, by supporting continuous quality improvement (CQI) activity among service providers. The nKPIs can also be used to support policy and service planning at the national and state/territory levels, by monitoring progress and highlighting areas for improvement.[32]
2.	Notify key stakeholders when nKPI data are used in research and/or policy:	
	2a.	AIHW to notify Department when nKPI data are used in national reporting or other reports (for example, Australia's Health, HPF).
	2b.	Department to notify stakeholders about AIHW's use of the data as well as their own internal use. Stakeholders include reporting organisations, NACCHO and the NACCHO Affiliates, HS DAG.

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[32] This was the purpose developed at the initial workshops and supported at subsequent ones.

Usefulness

The review examined the usefulness of the nKPIs to both government and to individual health services and the NACCHO Affiliates.

Usefulness to Government

To date, there is little to show that nKPIs are useful to Government for policy development. There are a range of issues that help account for this lack of utility. The three core factors identified through the review process include:

- questions of data quality
- recurrent breaks in time series
- lack of information on the factors associated with high or low indicator values.

A number of Department-funded projects have focused on improving well-known data quality issues within the nKPIs. These projects include the Data Validation Project, the Harmonisation Project and the ongoing work of the Data Quality Assessment and Support Project. This review supports the recommendations for a single consistent source for technical specifications, greater clarity in the communication of specification changes between all parties including the Department, the AIHW, reporting organisations and vendors as well as greater support for services to standardise data input and extraction processes.

The second issue, breaks in time series data, presents a challenge. Any recommendations made by this review that would cause further disruption to time series must be weighed against potential improvements the changes would bring.

Usefulness to health services

The most commonly identified uses of the nKPIs by organisations included:

- CQI at the organisation and measurement of the effectiveness of their services
- reporting back to the organisations' boards
- supporting funding proposals.

Opinions regarding the usefulness of the nKPIs varied greatly. Some services had the nKPIs fully embedded within their CQI processes, while others found their own (or their own jurisdictions') indicators more useful for their day-to-day work.

Benchmarking was seen by many as a highly valuable process, with some using either the Implementation Plan (IP) goal trajectories, selecting the 75th percentile from national reports or setting their own goals based on previous results. There was a desire for more useful and relevant benchmarks such as within a region or with like (peer services) and more guidance around selecting appropriate benchmarks.

Limitations to usefulness

While some services felt that the indicators themselves (for example, the selection of indicators and their specifications) were a barrier to the collection being useful to the service, the most commonly identified issue was concerns regarding data quality. This was followed by concerns that the Indigenous ‘regular client’ definition did not adequately capture who the services consider to be their clients.[33]

There are three main issues with the definition of ‘regular client’ (3 visits in 2 years) in the nKPIs. The first is that people who do not live in the service’s catchment area can become regular clients if they attend the service. While the ISPHCS provide care to these clients, they are not their main primary care providers. Thus, it may not make sense for the organisation to be ordering pathology tests for them or providing health checks.

The second issue, which overlaps with the first, is that the regular client definition cannot establish which organisation an individual may consider their primary care provider. If an individual is a regular client at several different services, they may be receiving best practice care, but that care may be spread between different organisations.

The third is that people who visit services infrequently (either because they are well or because they are underserviced) may be missed entirely.

The NT KPIs define clients as ‘usual residents of the community serviced by the clinic who had some contact with the clinic in the previous two years’. They argue that this definition allows health services to plan for the care needed by people in their local area. It also allows a focus on local hard-to-reach clients who nevertheless require treatment and need to be followed up.

In addition to the regular client definition, another factor that was raised multiple times in consultations, and is supported by the findings of the Data Quality Assessment and Support Project, is that a number of services lack staff or external support from people with the necessary skills to fully utilise data for CQI or service planning purposes. These resources were also seen as being inequitably distributed.

One service described having previously used the nKPIs comprehensively as part of their CQI processes. However, this service moved to participating in their PHN’s CQI program largely because they received support to interpret and utilise the data.

Below are recommendations for how to increase the usefulness of the nKPIs. These include recommendations around the definition of regular clients and increasing support for organisations to use the nKPIs. The suggestions around the content of the nKPIs in the next section should also help improve the collections’ usefulness, but need to be considered within an appropriate data development process.

Recommendations: Usefulness	
3.	Materials and training which will enhance services’ ability to use the nKPIs for CQI and needs assessment/planning, should be developed, building on already existing resources and case studies.
4.	Assess the extent to which different definitions of regular clients (for example, nKPI definition and current clients residing in the area) affect the quality and usefulness of nKPI data by conducting a small scale study using data from organisations which already use different definitions. Use the results from the analyses to determine whether building two client definitions into future collections is warranted.

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[33] The 3 visits in 2 years definition of a regular client is in line with the RACGP definition and may enable potential comparison to mainstream in the future. Not all services were opposed to the definition, with some services preferring this definition to their jurisdiction’s definition.

Content

A number of themes were highlighted during the review around the content of the nKPIs (relating to the selection of the indicators themselves, their technical specifications, and the potential addition of indicators in the future).

These issues include:

- The reasons for selecting those specific 24 indicators was not known to stakeholders. While most agreed that they were important, there was a lack of a clear sightline between the process indicators and the outcome indicators.
- The lack of indicators for children and young people, particularly focussed on prevention.
- Many of the indicators refer to chronic disease, but their technical specifications include only Type II diabetes (primarily), with some including CVD and COPD (chronic obstructive pulmonary disease). This is partly related to the inconsistent coding of diseases between services.[34]
- The specifications of some indicators do not match current best practice in either the target levels (for example, around blood pressure and HbA1c levels) or in the defined age groups.
- The technical specifications of some indicators do not match the intent of the indicator (for example, where the intention was to capture smoking during pregnancy but the indicator captures the smoking status of women who had a baby in the previous 12 months).

As part of the review, the AIHW was asked to identify whether there were potential changes which could be made to the indicators that would improve their specifications. The AIHW was also asked to provide an initial assessment of whether any indicators should be dropped or whether new indicators should be added.

Below and in Section 4.3, the main issues with each of the three groups of indicators are outlined and suggestions are provided for consideration. These suggestions are based on feedback provided during the consultations and on the known issues with the individual indicators. They can be used in a formal clinical and technical review where the costs and benefits of making any changes will need to be considered (more detail on these processes is provided in Section 5).

Maternal and child health indicators

(4 process-of-care indicators; 2 health outcome indicators)

Process-of-care indicators	Health outcome indicators
PI13 Antenatal visit before 13 weeks	PI02 Birthweight result—low
PI01 Birthweight recorded	PI11 Smoking status of females who gave birth in the previous 12 months
PI04 Child immunisation	
PI03 MBS health assessment—aged 0–4	

Review participants acknowledge that ISPHCS play a critical role in ensuring that Indigenous mothers and babies receive appropriate and timely maternal and child health services, whether through the provision of services directly or referral to other services. However, the

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[34] Mapping of disease coding between the different term sets used across clinical information systems is being undertaken by CSIRO through a current project for the Department.

current specifications of the maternal and child health indicators have a number of shortcomings.

For this set of indicators, there are disconnects between the intention of the indicator and the information that the indicator is able to capture. Some of these issues are due to the underlying structure of the clients' records at the organisation and the ability of the CIS to capture the correct information. Others are due to information being held outside the organisation (for example, the timing of first antenatal visit for mothers who receive antenatal care at other organisations), while others relate to the specifications themselves. The issues are summarised below. The results for PI04 (immunisations) are currently not reported because of data quality issues.

Indicator	What do we want to know conceptually?	What does the indicator currently capture?	Issues	Potential modifications for consideration
Pregnancy-related				
PI13	How many pregnant regular clients had their first antenatal visit in the first trimester?	Distribution of weeks at first antenatal visit, no visit, or not recorded for all Indigenous regular clients who gave birth in the 12 months up to the census date	Different age groups to PI11 Don't know if the mother was a regular client before her pregnancy (for example, the service couldn't have had an effect if she began attending after the first trimester or after the birth)	Collect//report for those who were regular clients prior to pregnancy Align age groups with PI11
PI11	How many pregnant regular clients smoked during pregnancy?	The smoking status of Indigenous regular clients who are aged 15 and over, and gave birth in the 12 months up to the census date (as a proportion of those whose smoking status was recorded)	Don't know whether the smoking occurred during pregnancy or whether there was any change Don't know how many did not have their status recorded	Respecify to capture a measure of smoking status during pregnancy and/or change in smoking status
Infant health				
PI01	How many babies born to regular clients had their birthweight recorded? (alternatively, how many babies who are regular clients had their birthweight recorded)?	Proportion of Indigenous babies born in the 12 months up to the census date whose birthweight has been recorded	Includes babies who present for one-off acute visits only Excludes babies without a medical record of their own, even if their information is recorded in their mother's record	Collect only for babies of regular clients and/or babies who are regular clients themselves
PI02	The birthweight distribution of babies born to regular clients (alternatively, of babies who themselves are regular clients)	Distribution for babies born in the 12 months up to the census date who have a medical record – excluding multiple births (including twins)	Same issues as above. If the justification for the indicator is that it's important for clinical practice to know a baby's birthweight, multiple births should be included. Note that the current specification matches national reporting of birthweight rather than clinical practice.	Collect only for babies of regular clients and/or babies who are regular clients themselves Consider dropping exclusions for multiple births and reporting birthweight for each child

(continued)

Indicator	What do we want to know conceptually?	What does the indicator currently capture?	Issues	Potential modifications for consideration
Child health (0-5)				
PI03	How many young children who are regular clients had a child health check in the previous 12 months?	Number of 0–4 year old regular clients who had an MBS 715 claimed in the past 12 months	Only counts those with a claimed 715 (although Communicare can report those done but not claimed) so relies on GP availability Doesn't include if a 715 was done elsewhere Infants, in particular, should be getting regular developmental checks, which some do in place of a 715.	Include non-VR (Vocationally Registered) GP health checks (228) along with 715s
PI04	How many young children (under age 5) who are regular clients are fully immunised for their age?	Age groups are: • 12 months to less than 24 months • 24 months to less than 36 months • 60 months to less than 72 months	There are two main issues: 1. definitions—do not line up with current schedules 2. operational—there is not a simple way in the CIS to just code up to date or on catch-up schedule. Instead, requires all dates of each immunisation to be entered and since AIR does not have the functionality to 'talk' to the CIS, requires someone to enter manually.	Revise in light of current schedule and age groups aligned to AIR national reporting (April 2019 NIP) Department to investigate potential for improved AIR functionality (for example, for child's immunisation record to be downloaded directly into the service's CIS); Communicare to establish alternative extraction method that does not depend upon child being part of the recall system. All vendors to investigate option for a single 'fully immunised for age' drop down box for clinicians.

Table 4.6: Suggestions for consideration for the maternal and child health indicators

Indicator	Suggestions
Changes to specifications (noting these would require changes to CIS)	
PI13	Report only for those who were regular clients prior to pregnancy
PI11	Respecify to capture a measure of smoking status (or change) during pregnancy
PI01	Collect only for babies of regular clients and/or babies who are regular clients themselves
PI02	Drop exclusion for multiple births and redefine population as at P101– birthweight should be reported for each child
PI03	Include non-VR GP health checks (228) along with 715s
PI04	Review specification in light of current schedule and age groups aligned to AIR national reporting (April 2019 NIP)
Reducing burden and improving data quality	
PI04	Department to investigate potential for improved AIR functionality (for example, for child's immunisation record to be downloaded directly into the service's CIS); Communicare to establish alternative extraction method that does not depend upon child being part of the recall system. All vendors to investigate option for a single 'fully immunised for age' drop down box for clinicians.

The easiest of these changes to implement would be to include non-VR GP health checks as well as 715s (P103). This would benefit those services without GPs. Future reporting of the indicator would need to acknowledge the change in specification.

Review of the PI04 specifications and AIR functionality is critical as the indicator is currently out of alignment with the immunisation schedule, is burdensome for services, and the data quality is poor. Advice is required from the Department as to the status of the improved AIR functionality.

Making the other changes would likely involve significant investment, and the benefit of these changes must be weighed against the costs.

Preventative health

(6 process-of-care indicators; 4 health outcome indicators)

Process-of-care indicators	Health outcome indicators
PI09 Smoking status recorded	PI10 Smoking status result
PI16 Alcohol consumption recorded	PI12 Body mass index (BMI) classified as overweight or obese
PI03 MBS health assessment for adults aged 25 and over	PI17 AUDIT-C result
PI20 CVD risk assessment	PI21 CVD risk assessment result
PI22 Cervical screening	
PI14 Immunisation against influenza for clients aged 50 and over	

The main issues with the preventative health indicators are less conceptually based and centre more around the technical specifications. As highlighted below, expanded age ranges should be considered for health checks, influenza vaccinations, CVD risk and BMI result. These would bring the indicators more in line with recommended practices and address the issue that young people/younger adults are missed in the current indicators.

Participants in all three types of the consultations also noted that the specification of the vaccination questions was unable to pick up whether the service had offered the client the vaccination and the client refused.[35]

Two additional issues were also raised around the current specification of PI12 (BMI result)—whether an indicator around the proportion of the client population with height and weight recorded would be a more meaningful indicator for CQI for services, and whether BMI is the best outcome measure (or whether waist circumference might be more meaningful).

Questions were also raised around whether the specification for health checks should be 24 months or 12 months. Indigenous Australians are eligible for a 715 every nine months, and the specification of PI03 for 0–4 year olds is 12 months. However, changing the specification would result in a break in series.

The selection of AUDIT-C as the sole alcohol screening tool was contentious as the RACGP guidelines include additional options for services to use along with the AUDIT-C.

Table 4.7: Suggestions for consideration for the preventative health indicators

Indicator	Suggestions
Changes to specifications—age groups only	
PI09, PI10	Discuss whether to change age range to 10 years plus (as per RACGP guidelines)
PI03	Include 5 years plus and, at the highest level, report children (0–14), adults (15–54) and older people over the age of 55 years as per Medicare
PI20, PI21	Lower age range following completion of current work being undertaken around screening guidelines nationally.
PI14	Change age range to include all Indigenous regular clients 6 months and over (as per the NIP)
Other changes to specifications	
PI03	Review whether time frame should be in the previous 12 months to align with policy/eligibility.[36] Include non-VR GP health checks (228) in addition to 715s
PI12	Change to the proportion of regular clients with height and weight recorded for all age groups Discuss whether waist circumference for those age 18+ would be a better outcome measure than BMI Consult on whether the outcomes (for example, distribution of BMI categories) should be kept or dropped
PI21	Include those previously identified as high risk who have already commenced treatment (for example, so that those who were ever at high risk continue to be classified as high risk)
PI14	Add pneumovax for relevant age groups (50+)
Other issues	
PI22	Clarify with services how long the transitional definitions are to be in place
PI17	Note that Audit C is not the only screening tool recommended by the RACGP

Changes to the age specifications of the indicators should be relatively straightforward, as they would involve expansion of already existing extraction tools, and would not represent a break in series (as the additional age groups would be presented separately).

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[35] Some stakeholders indicated that rates of refusal were high for their clients, or that their clients had already received a vaccine elsewhere.

[36] This change does not deal with the underlying issue that in areas with multiple practices (Indigenous-specific and mainstream), regular clients of one service may have had their health checks completed at a different service.

Chronic disease management

(6 process-of-care indicators; 3 health outcome indicators)

Process-of-care indicators	Health outcome indicators
PI07 General Practitioner Management Plan (Type 2 diabetes)	PI24 Blood pressure result (Type 2 diabetes)
PI08 Team Care Arrangement (Type 2 diabetes)	PI06 HbA1c result (Type 2 diabetes)
PI23 Blood pressure recorded (Type 2 diabetes)	PI19 Kidney function test result: - eGFR result (type 2 diabetes or CVD clients - ACR result (type 2 diabetes)
PI05 HbA1c result recorded (Type 2 diabetes)	
PI18 Kidney function test recorded (Type 2 diabetes or CVD)	
PI15 Immunised against influenza (Type 2 diabetes or COPD)	

As currently specified, the chronic disease management indicators focus heavily on Type 2 diabetes, with kidney function tests for CVD and influenza immunisation for clients with COPD the only non-Type 2 diabetes chronic diseases included.

Several key issues were raised about the current specifications, including:

- the need to update the specifications for blood pressure and HbA1c results to reflect current guidelines
- the need to include non-VR MBS item numbers for GPMP and TCAs.

These should be relatively straightforward changes to make if there is agreement from the governance group.

Participants also noted that since guidelines suggest HbA1c tests should be performed every three to six months, it was questionable whether the 12 month time frame was the most appropriate. However, changing the time frame would require changes to the extractions, and would also represent a break in series.

More complex issues were raised about the kidney function tests and results. These included problems with ensuring consistency of terminology in pathology results and their incorporation into CIS[37] and problems with the specification itself.[38]

There were also, as discussed previously, mixed views on the addition of other chronic diseases to this indicator subset. The advantage is that the indicator would better capture the range of clinical issues that ISPHCS manage. The disadvantage is that it would be resource intensive to collect the data and might dilute the impact of the current set. It is recommended that these issues be considered further.

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[37] Issues exists with the transfer of renal function pathology results and their interaction with CIS storage and extraction methods. The ongoing Pathology Information, Terminology and Units Standardisation project, fully funded by the Department, is likely to have implications for improving consistency for this indicator but also other current indicators that rely on pathology results (PI06/22) and any future development such as any STI indicators.

[38] A number of participants suggested that the current specifications for PI18 and PI19 are less than ideal. Issues include the fact that it does not capture if they have had both tests, and whether an indicator which captures universal screening for renal disease in Aboriginal and Torres Strait Islander Australians over age 30 might be more beneficial than an indicator which targets those with a chronic disease'.

Table 4.8: Suggestions for consideration for the chronic disease indicators

Indicator	Suggestions
Changes to specifications—aligning with best practice guidelines[39]	
PI24	Amend cut-off to 140/90mmHg in line with national recommendations
PI05	Consider whether to drop 12 month requirement and change to had an HbA1c test in previous 6 months
PI06	Change goal level to 6.5%–7.5% as per RACGP/Diabetes Australia guidelines (to capture target of <=7%)
PI07, PI08	Include non-VR GP TCAs and GPMPs (229, 230)
PI18, PI19	Review specifications and consider changing to a population screening measure for all 30+ age groups with both an eGFR and an ACR recorded who have had full screening every two years, then sub-report for those with chronic disease
Future development	
PI07, PI08	Pending successful completion of the Department's current project to align chronic disease terms sets, consider the expansion to other diseases beyond Type II Diabetes

The high-level recommendations related to the content of the nKPIs are presented below.

Recommendations: Content
5. Establish a process to regularly review indicator technical specifications to ensure optimal alignment of the nKPIs with best practice guidelines, utilising both clinical and technical working groups. Priority should be given to the review of indicators requiring adjustments to best practice guidelines, expansion of age groups, and the inclusion of VR items.
6. Establish a committee with representation from government and the sector to formally evaluate proposals for the addition of new indicators to the nKPI using established frameworks for indicator development. As a minimum there should be a demonstration of need for and utility of any new indicator. Consideration could be given to ear health, eye health, mental health, and STI indicators[40][41].

Ways of prioritising indicator development

As previously discussed, there are three main reasons underpinning the need to make changes to the current specifications of the existing indicators. These include:

- better alignment with clinical practice guidelines
- filling identified gaps (for example, in age ranges)
- better alignment of the technical specifications with the intent of the indicator.

Decisions about whether (and which) changes to make, and how to prioritise them requires additional considerations around implementation such as:

- the relative ease/difficulty of making the change

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[39] As noted in RACGP 2016, the HbA1c target levels are controversial. They note that the National Institute for Health and Clinical Excellence Quality and Outcomes Framework in the UK has moved their HbA1c target to 7.5%, which would mean a measurement range of 6.5%-8%.

[40] While the review was being conducted, a SEWB Clinical Working Group under the guidance of HS DAG looked at developing an appropriate SEWB nKPI. The committee concluded that they would not recommend one at the moment due to the difficulties of identifying one single definition or collection tool (for example, whether there is a focus on mental health diagnoses or SEWB more generally), and the fact that the RACGP Guidelines do not recommend universal screening for mental health issues. The consultations found mixed support, with all stakeholders acknowledging the importance of mental health and SEWB more broadly. Suggestions included using the number of GP mental health plans as an indicator, but questions were then raised about the appropriate denominator.

[41] These were listed in the project brief of being of interest to the Department.

- the impact (for example, whether the change would represent a complete break in series)
- the costs involved.

To decide the order in which to review the individual indicators, they can be categorised according to the reasons underpinning the change and their implementation. For example, there are a group of indicators where the potential changes should be relatively straightforward to make if approved, including changes to age groups, changes to the defined levels of clinical outcome indicators, and the addition of non-VR GP MBS items. These could be considered ‘quick wins’.

Another way of grouping the indicators for review of their technical specifications would be to consider all those which fit into a particular group—for example, reviewing all the indicators where specifications need changing to align with current clinical guidelines/practice, then classifying them by ease of implementation and impact. For example, some changes (such as when a time frame is changed) would represent a break in series. Others would not lead to a break in series because they represent best practice at a point in time (for example, HbA1c levels).

It is important to note that there are also a group of indicators where potential changes would require significant investment. For example, the maternal and child health indicators would involve significant changes to the underlying CIS in order to link mothers and babies and to be able to identify whether a woman had been a regular client prior to pregnancy.

Addition of new indicators

There were mixed views on whether additional indicators should be added to the nKPIs. Participants acknowledged there were a number of important health issues that do not have indicators (such as mental health, ear health, eye health, STIs). However, whether the nKPIs was the proper place for them was not universally agreed.

Participants unanimously agreed there needed to be a transparent process for assessing the costs and benefits of adding and/or changing indicators. This was one of the recommendations under this heading, and will be discussed more fully in Section 5 of this report.

Reporting burden

The burden of collecting and reporting the nKPIs varied among services. Those with more advanced data management systems and protocols (and where the nKPIs was embedded within CQI practices) reported less burden than other services. It is important to note that reliable and valid extractions of data also require consistency in how clinicians and staff members enter information into the CIS (for example, using provided drop down boxes instead of free text).

According to the health services interviewed for this review, the main sources of reporting burden for the reporting period January–June 2018 (and prior) were:

- ensuring CIS systems were up to date (which often required investments of time and money)—this was particularly problematic when there was little time between when changes were made and when data needed to be extracted
- requiring the use of multiple extraction tools (for example, a number of services would use one extraction or reporting tool for internal everyday practices such as the generation of recall and reminder lists or CQI, then have to use different tools to extract the data for the nKPIs)

- the time needed to train staff members to ensure that information was input correctly
- having to report slightly different specifications of KPIs between the nKPIs and other reporting requirements
- quality control of the data, particularly when different extraction tools produced different results for the same indicator
- having to manually enter data for some of the indicators and/or seek it from sources outside their organisation (particularly around birthweight, antenatal care, immunisations, pathology results)
- having to report on all indicators in the nKPIs even if the organisation did not provide the relevant services.

Recommendations for reducing the burden of reporting to the nKPIs include:

Recommendations: Reporting burden	
7.	Give advance notice of when changes in either technical specifications, CIS and/or extraction tools will be made.
8.	Develop materials and training within each CIS that will enable easier use among clinical users within the services.
9.	Work with AIR to enable inter-system population of immunisation data.
10.	To enhance the data quality of nKPIs that rely upon pathology results, the Department should progress discussions between the RCPA and vendors to ensure pathology results are reported back to services in a consistent manner and can be readily extracted.

Future development

Three themes were highlighted during the review around the future development of the nKPIs:

- The need for a better and more transparent data governance and data development process to ensure that the indicators in the nKPIs are relevant and provide meaningful information (as in Recommendation 5).
- The need for more context to be provided around the data that are submitted.
- Whether a system of core and voluntary indicators could be developed. If this were the case, all organisations would report on a core set of nationally relevant indicators. Some organisations could then choose to report on additional relevant indicators (for example, those that apply in particular regions of Australia or those that relate directly to their purpose—such as maternal and child health). Indicators could be moved from voluntary to core if they became relevant for all organisations.

Below are recommendations for the future development of the nKPIs (noting that data governance and data development are addressed in recommendations 5 and 6).

Recommendations: Future development	
11.	Work should begin towards a single Indigenous-specific primary health dataset for analysis and reporting which combines organisation level data from the OSR with the nKPIs.[42]
12.	Develop a system of core and voluntary indicators. This could address differences in what is required for national reporting (core) versus local need (voluntary) and ensure that data are standardised to allow comparison between areas.

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[42] As noted previously, this would be an organisation-level dataset, not a unit-record file.

4.3 Implementing the recommendations

Many of the recommendations for the nKPIs relate to the governance of the collection and technical issues. Governance has already been discussed in the content section (see recommendations 5 and 6). The importance of this is again emphasised and more detail for how to move this forward is provided in Section 5. Table 4.9 summarises the high-level recommendations.

Table 4.9: Summary of recommendations for the nKPIs (high level)

Recommendations: Purpose	
1.	Clearly articulate the purpose of the nKPIs and obtain relevant stakeholder endorsement:
1a.	The purpose of the nKPIs is to improve the delivery of primary health care services, by supporting continuous quality improvement (CQI) activity among service providers. The nKPIs can also be used to support policy and service planning at the national and state/territory levels, by monitoring progress and highlighting areas for improvement.
2.	Notify key stakeholders when nKPI data are used in research and/or policy:
2a.	AIHW to notify Department when nKPI data are used in national reporting or other reports (for example, Australia's Health, HPF).
2b.	Department to notify stakeholders about AIHW's use of the data as well as their own internal use. Stakeholders include reporting organisations, NACCHO and the NACCHO Affiliates, HS DAG.
Recommendations: Usefulness	
3.	Materials and training which will enhance services' ability to use the nKPIs for CQI and needs assessment/planning, should be developed, building on already existing resources and case studies.
4.	Assess the extent to which different definitions of regular clients (for example, nKPI definition and current clients residing in the area) affect the quality and usefulness of nKPI data by conducting a small scale study using data from organisations which already use different definitions. Use the results from the analyses to determine whether building two client definitions into future collections is warranted.
Recommendations: Content	
5.	Establish a process to regularly review indicator technical specifications to ensure optimal alignment of the nKPIs with best practice guidelines, utilising both clinical and technical working groups. Priority should be given to the review of indicators requiring adjustments to best practice guidelines, expansion of age groups, and the inclusion of VR items.
6.	Establish a committee with representation from government and the sector to formally evaluate proposals for the addition of new indicators to the nKPIs using established frameworks for indicator development. At a minimum there should be a demonstration of need and utility of any new indicator and development of the indicator should ideally follow an established framework. Consideration should be given to ear health, eye health, mental health, SEWB, and STI indicators.
Recommendations: Reporting burden	
7.	Give advance notice of when changes in either technical specifications, CIS and/or extraction tools will be made.
8.	Develop materials and training within each CIS that will enable easier use among clinical users within the services.
9.	Work with AIR to enable inter-system population of immunisation data.
10.	To enhance the data quality of indicators that rely upon pathology results, the Department should progress discussions between the RCPA and vendors to ensure pathology results are reported back to services in a consistent manner and can be readily extracted.
Recommendations: Future development	
11.	Work should begin towards a single Indigenous-specific primary health dataset for analysis and reporting which combines organisation level data from the OSR with the nKPIs.
12.	Develop a process for assessing whether a system of core and voluntary indicators can be created. This can address differences in what is required for national reporting (core) versus local need (voluntary) and ensure that data are standardised to allow comparison between areas.

5 Data governance and data development

Three overarching issues were identified that applied to both collections—these included data governance, bringing the data from the two collections together in the future for analysis and reporting, and setting up a formal data development process. This section discusses each of those in turn.

5.1 Data governance

A clear theme to emerge from the review was the need for a strengthened data governance process for both collections to ensure that the required data were meaningful vand aluable for all stakeholders.

The issues identified with the current governance structures were:

- While HS DAG provides advice to the Department on both collections, the OSR is a Department collection and the nKPIs come under the Australian Health Minister's Advisory Council (AHMAC) structure. In practice, this means that while changes can theoretically be made quickly to the OSR by the Department, changes to the nKPIs must undergo a different process through AHMAC.[43]
- The governance arrangements are not understood by services.
- While data custodianship, privacy, and technological/submission-related aspects of the collections have previously been spelled out, indicator development processes are less clear and less visible, particularly around who can/should make decisions and set timelines for the implementation of changes.
- The services (the data providers) did not feel that they were involved enough in the data development process for both collections. They requested more involvement in this to ensure that what is being captured is valuable, and that the practical implications for services of any changes are considered.
- It was unclear where the 'source of truth' was for the supporting materials for the collections (OCHREStreams, METeOR, AIHW help guides) which led to confusion for services and to differing interpretations of specifications from vendors. It is expected that these issues will improve with the development of the HDP and the work of the harmonisation project.
- The reasons why some organisations report to the OSR alone, some to the nKPIs alone and some to both was not clear. For example, there is not a one-to-one alignment of organisations reporting to the OSR and to the nKPIs and the AIHW is often asked to explain this.
- There are sometimes differences between the two collections in the levels at which data are reported for the same organisation (for example, for services with multiple sites, the nKPI data may be reported at one level and OSR data at another level).

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[43] The nKPIs was a result of the COAG National Indigenous Reform Agreement (NIRA) supporting the Closing the Gap on Indigenous disadvantage whole of government commitment. The Closing the Gap Refresh, overseen by the partnership between Governments and the Coalition of Peaks, may have similar implications for future data collections.

High-level oversight

To address these issues, Figure 5.1 presents a recommended data governance structure for the collections going forward.

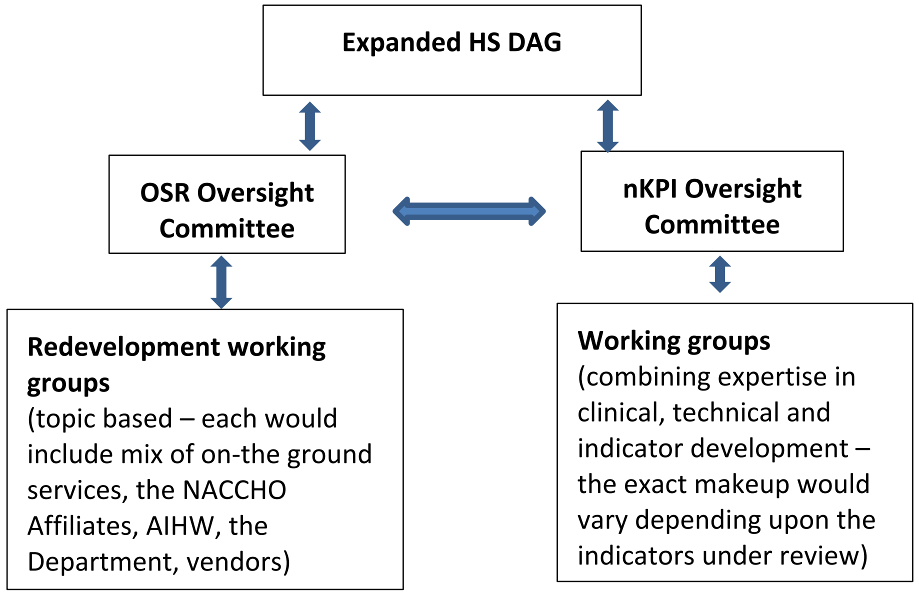

Figure 5.1: Proposed data governance structure

A recommended way of addressing these issues would be for an expanded HS DAG to have clearly defined oversight of both the OSR and nKPIs, supported by a series of working groups that combine clinical, technical, and on-the-ground experience from services. In particular:

- The membership of HS DAG should be expanded so that participation is increased from the NACCHO Affiliates and from both community controlled and non-community controlled health services. This is in addition to the already existing members which include NACCHO, the Department, the AIHW, the NT Government, the RACGP and the NIAA.
- Membership in the subcommittees/working groups would be drawn from broader stakeholder groups (that is, they would not need to be members of HS DAG to participate, instead the members of HS DAG could nominate appropriate experts and expressions of interest could also be sought).
- The initial tasks for the expanded HS DAG would be to establish a data development plan for each of the two collections. For the OSR, this would include responsibilities and timelines for revising the content in line with the recommendations from this review (see Section 5.3 for the suggested implementation approach).
- For the nKPIs, this would include first establishing a set of criteria for assessing the recommended changes for each indicator and a process for the consideration/nomination of additional indicators (see Section 5.3). This would also need to consider whether it is possible to have a core set of indicators that all services report against and a set of voluntary indicators which services could choose to report on, depending on local priorities.

The AIHW has well-established processes for indicator development and selection within the Indigenous and mainstream health and welfare sectors (AIHW 2013). These have included the development of the indicator set for the Health Performance Framework, Better Cardiac

Care, NIRA, children's headline indicators, and national maternity data. The AIHW routinely establishes and seeks the advice of expert reference groups for clinical-related data. For example, the Expert Commentary Group, which includes experts in the fields of obstetrics, midwifery, research, statistics and health policy, plays a significant role in the selection and specifications of the National Core Maternity Indicators.[44]

It is also essential that communication strategies around the data development process and criteria are established to increase transparency and visibility of how and why decisions around both collections are made.

5.2 Creating a single Indigenous-specific primary health care dataset for analysis and reporting

On their own, the OSR and nKPIs each capture only a small part of the work that ISPHCS do and the communities in which they operate. The two collections also represent only one part of organisations' overall reporting requirements (Figure 5.2).

One of the limitations of the nKPIs is that it is purely a set of clinical indicators and contains no data on the organisations themselves which would help provide context to the results.[45] For example, in order to look at the distribution of the indicator values across similar types of services (such as by client numbers or workforce FTEs), the nKPI data need to be combined with the OSR data for analysis and reporting.

Similarly, in order to get more detailed information on clients beyond Indigenous status and age (such as the number of Indigenous regular clients with Type 2 diabetes), the OSR data need to be merged with the nKPI data.

There are several issues with this approach, however. First, there is not a one-to-one match between the two datasets (Table 5.1). There are organisations which report only to the nKPIs and not the OSR, and others that report to the OSR and not the nKPIs.

Table 5.1: Organisations reporting to the OSR and/or the nKPIs, 2017–18 and June 2018[(a)]

Organisations	Number
Total organisations	**247**
Reporting to the nKPIs only	49
Reporting to the OSR only	14
Reporting to both the nKPIs and OSR	186
Total reporting to the nKPIs	**233**
Total reporting to the OSR	**198**

(a) Only includes organisations with IAHP funding reporting to the primary care modules of the OSR.

Source: AIHW analysis of OSR and nKPI data.

Second, for organisations with multiple service sites, there may be differences in the levels at which the two types of data are reported. For example, nKPI data may be reported at site level, but OSR data reported at the organisational level.

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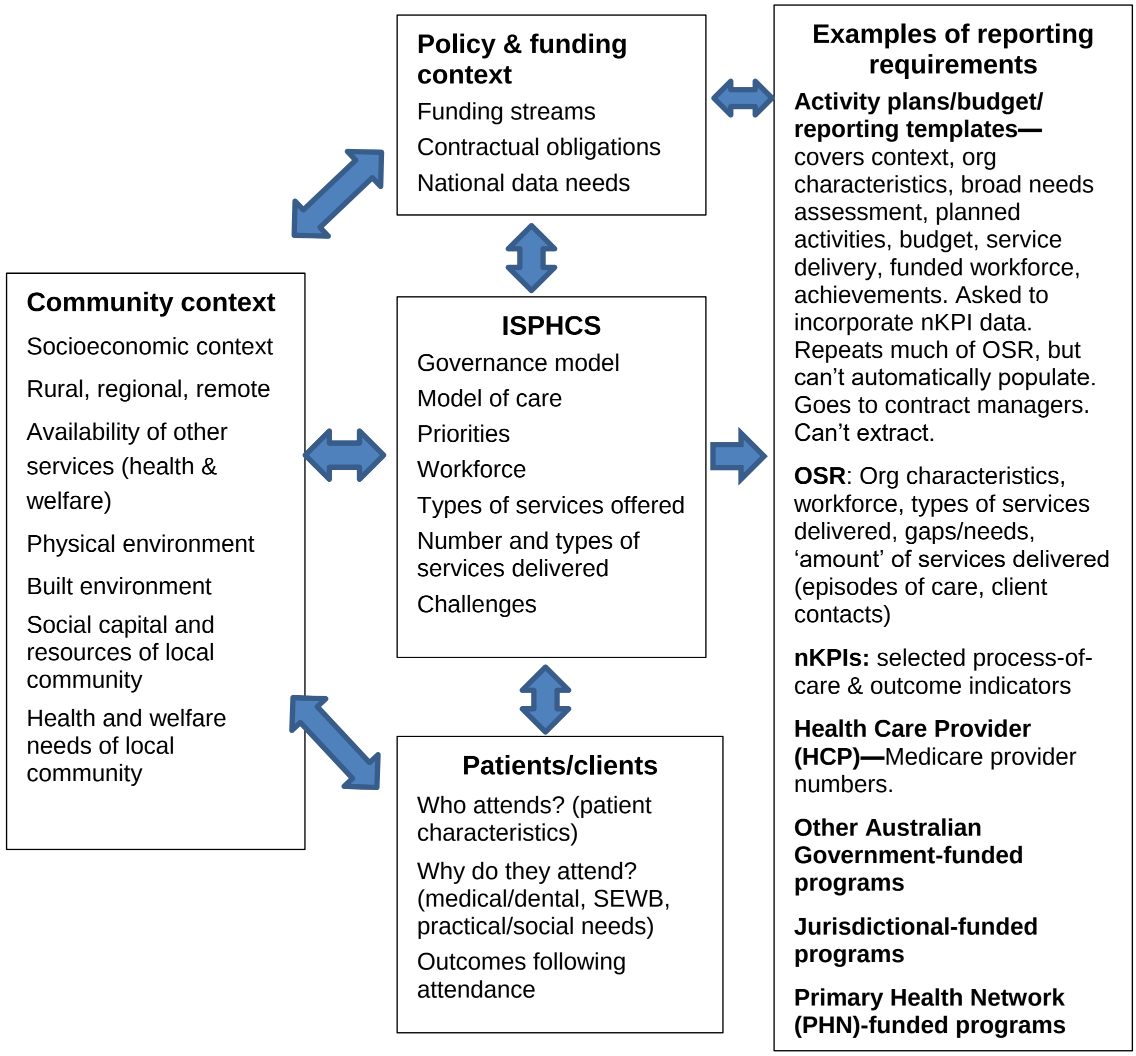
[44] The NCMI is designed to assist in improving the quality of maternity services in Australia by establishing baseline data for monitoring and evaluating practice change

[45] Some characteristics are available on the Department's masterlist.

In addition, because the two datasets have developed separately, data which might be useful for the nKPIs may not be collected in the OSR. Finally, the nKPIs are collected twice a year for Aboriginal and Torres Strait Islander regular clients defined as attending 3 times in 2 years, while the OSR reflects an entire financial year's activities and services and counts all clients in a single year, no matter how many times they attended the health service.[46]



Policy & funding context

Funding streams

Contractual obligations

National data needs

Community context

Socioeconomic context

Rural, regional, remote

Availability of other services (health & welfare)

Physical environment

Built environment

Social capital and resources of local community

Health and welfare needs of local community

ISPHCS

Governance model

Model of care

Priorities

Workforce

Types of services offered

Number and types of services delivered

Challenges

Patients/clients

Who attends? (patient characteristics)

Why do they attend? (medical/dental, SEWB, practical/social needs)

Outcomes following attendance

Examples of reporting requirements

Activity plans/budget/ reporting templates—covers context, org characteristics, broad needs assessment, planned activities, budget, service delivery, funded workforce, achievements. Asked to incorporate nKPI data. Repeats much of OSR, but can't automatically populate. Goes to contract managers. Can't extract.

OSR: Org characteristics, workforce, types of services delivered, gaps/needs, 'amount' of services delivered (episodes of care, client contacts)

nKPIs: selected process-of-care & outcome indicators

Health Care Provider (HCP)—Medicare provider numbers.

Other Australian Government-funded programs

Jurisdictional-funded programs

Primary Health Network (PHN)-funded programs

Figure 5.2: Contextual framework—the collections in context

Bringing information from the two collections together into one Indigenous-specific primary health care dataset for analysis and reporting would have a great deal of value by providing a single source of information about organisations receiving IAHP funding and their clients.

The staged redevelopment of the OSR could consider adding items that provide context to the indicators in the nKPIs.[47] For example, there are currently a number of nKPIs focused on clients with Type 2 diabetes. Service-level items which would be useful for providing context around Type 2 diabetes care in general and the nKPIs specifically would be:

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[46] Data are collected on the Indigenous status of clients.

[47] However, the organisational items should not be limited to context around the nKPIs.

- whether the service has a diabetes educator
- whether the service uses a recall and reminder system
- whether point of care testing is used for HbA1c
- whether clients have access to all the health professionals required for best practice diabetes cycles of care
- whether the services provide health promotion/groups for prevention and management
- gaps, challenges, and successes.

One suggestion from the review of the OSR is to collect more detailed information (for example, diagnosis information) on clients who attend the ISPHCS through their CIS. This could expand the chronic disease data in the nKPIs to include other diseases, in addition to Type 2 diabetes, such as mental health, substance use, cardiovascular disease, respiratory diseases, and musculoskeletal conditions (which are the conditions that contribute most to the burden of disease for Indigenous Australians (AIHW 2016a)). This data could be used to help target remediation efforts and resources.

However, while the idea of including more chronic diseases was supported by a number of stakeholders, others raised concerns about what the actual specifications would be and the amount of resources needed to set up the processes to collect and report them.

Working towards a single Indigenous-specific primary health care dataset for analysis and reporting would require:

- an alignment of the reporting requirements for organisations who receive IAHP funding
- decisions around the levels at which particular data are collected and reported for those organisations with multiple service sites
- stabilisation of the indicators in the nKPIs
- adequate time for vendors and the reporting organisations to ensure processes are in place for collecting and extracting the required information
- significant input from all stakeholder groups.

This integration could occur by bringing the reporting of the OSR and nKPIs together into a single collection. It could also occur by bringing the key elements from each collection into a service-level data collection after they have been submitted, supplemented by data from other sources. This approach would require identifying what data items would be most relevant for a national dataset first (for example, using the conceptual framework in Figure 5.2), and then agreeing upon the mechanisms for how the data would be collected.

5.3 Data development approach

It is recommended that a data development strategy is prepared in consultation with key stakeholders. This data development strategy will set clear goals and outline the processes for meeting these goals in the next three to five years.

This strategy could be modelled on the staged approach taken in the National Maternity Data Development Project (NMDDP) which was conducted over 6 years and yielded considerable national improvements in the quality and consistency of the data collected (including new items) and in their usefulness to a range of stakeholders (see Box 5.1) (AIHW 2014).

Box 5.1: The NMDDP

Key elements that led to the success of the NMDDP included:

- good governance structures and stakeholder involvement throughout, including in the initial development of the workplans
- clear and transparent goal setting for what was to be accomplished, when and by whom in each stage of the project
- public reporting throughout all stages of the project on what was happening as well as data reports.

It is essential that the data development strategy for the two collections also takes into account the ongoing policy development and data needs related to the refreshed Closing the Gap framework.[48] The revised national Closing the Gap framework, once agreed, will inform investment priorities and set out implementation principles to support greater partnership with communities and regions. It will also include a set of indicators and targets—these may use data already collected from the OSR and nKPIs or be new items (that would need to undergo an appropriate data development process).

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[48] On 12 December 2018, the Council of Australian Governments (COAG) issued a draft framework for Closing the Gap and agreed this framework would be finalised through a partnership with Aboriginal and Torres Strait Islander peoples. A Partnership Agreement between the Coalition of Aboriginal and Torres Strait Islander Peak Organisations and COAG members came into effect on 22 March 2019. This Partnership Agreement means that for the first time Aboriginal and Torres Strait Islander peoples, through their peak bodies, will share decision making with governments on Closing the Gap. It acknowledges that direct engagement and negotiation is the preferred pathway to productive and effective outcomes. The Partnership Arrangement includes a Joint Council on Closing the Gap, comprising 12 representatives from the Coalition of Aboriginal and Torres Strait Islander peaks, alongside Ministerial representation.

Box 5.2 highlights the key steps needed for the development of national data collections, which can be used to help guide the future development of the OSR and nKPIs.

Box 5.2: Key steps in the development and ongoing management of national data collections

- Identify a clear **purpose** for the data collection (what questions will the data answer? who are the data needed from?).
- Document **governance.**
- Clarify the **broad topics** that need to be included in order to meet the purpose(s).
- Develop the **individual items/questions** under each topic (for example, the collection instrument).
- Specify the **collection process** (how will the data be collected within the reporting organisation—are there changes needed at the organisational level to ensure that the data can be collected in a reliable and valid manner? What materials need to be developed to facilitate this process?).
- Specify the **submission process** (once the data have been collected, how will they be submitted?).
- **Reporting/use of data** (how will the data be cleaned? Who will report on the data and how will the data be used?).
- **Review** (is there a process in place for identifying issues related to the previous steps?).

It is critical that stakeholder engagement and collaboration, along with clear governance arrangements, underpin all the steps.

As discussed in Section 5.1, the key steps for the nKPIs is first to establish a set of criteria for assessing the recommended changes for each indicator and then to put in place a process for the consideration/nomination of additional indicators once an agreed governance structure has been put in place. There are a number of steps/considerations for each of these processes.

For **existing indicators**, this includes:

- Establishing the priorities for reviewing individual indicators – for example, alignment with clinical guidelines? Filling known gaps? Ease/difficulty/costs?
- Setting a timetable/schedule for review of the individual indicators
- Agreement on transparent assessment criteria, for example:
  - Does the indicator still meet the SMART (Specific, Measurable, Attainable, Relevant, and Time-Bound) principles?
  - What is the current data quality assessment of the indicator?
- Collating the information needed to inform decision-making about whether to implement changes for each indicator:
  - Would the change fill an important gap in knowledge or practice?
  - Would the change bring an indicator in line with clinical guidelines/best practice?.
  - Would the change represent a complete break in the time series?
  - What is the financial cost of making the change—this includes the costs of changing the underlying CIS processes for each vendor (including the level of difficulty involved), the costs of educating staff within the services about the changes, training

the staff who organise the reporting of the nKPIs every six months, along with any required changes to the HDP, EDW and AIHW systems.

Agreement would then need to be reached on whether/which changes should be taken to the implementation step for addition to the data development plan.

The steps are slightly different for reviewing the potential inclusion of **new indicators**:

- Establish a formal protocol for the proposal of additional indicators where proponents would need to address the following issues:[49]
  - Is the proposed indicator an outcome or a process linked by evidence to improved outcomes? For example, is it measuring an outcome that reflects quality of care? If the indicator is measuring a process is it linked by evidence to improved outcomes and supported by guidelines?
  - Does the proposed indicator meet a national priority area? If so, which one?
  - Is it only being asked of Indigenous specific primary health services? If so, why?
  - How feasible is it to measure the indicator? What changes would have to be put in place to capture it?
  - Will the proposed indicator support quality improvement? Does it relate to an area where there is variation in practice? Is it an area where adoption of best practice could improve quality in terms of the impact on outcomes (effectiveness, experience or safety) for the population?
  - How much would it cost to implement? Who would bear the cost?

Agreement would then need to be reached on whether/which additional potential indicators should be implemented and added to the data development plan.

The priorities for the OSR moving forward should be the redevelopment of the cultural safety section to better reflect the priorities and practices as defined by the key stakeholders, improving ways of capturing the holistic approach to health taken by the ISPHCS, and improving the gaps, challenges and strengths section.

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[49] Some of these questions have been adapted from the *National Institute for Health and Care Excellence 2017 Indicator Process Guide* (available at https://www.nice.org.uk/media/default/Get-involved/Meetings-In-Public/indicator-advisory-committee/ioc-process-guide.pdf)

6 Progress since the review

This section looks at progress made between the time the review was conducted and the release of this report. Importantly, at the time of the review, the HDP was in development and other data quality improvement projects were ongoing. Since that time, the HDP has been used as the portal for organisations to submit their nKPI and OSR data; some of the data quality improvement projects have been completed; and the AIHW and the Department have had ongoing conversations to ensure that the review findings are taken into consideration in the ongoing development of the HDP and in the future development of the collections. As such, progress has already been made in some areas.

6.1 Current status of the redevelopment of the OSR

In late 2018, the AIHW provided the Department with advice on:

- a staged approach to the redevelopment of the OSR
- functionality to be built into the HDP that would reduce the reporting burden on services
- suggestions for specific changes to the structure/content of the collection instrument and the wording of individual items for further consultation with key stakeholders.

Progress has been made on a number of these issues and the AIHW continues to work with the Department on the redevelopment. In particular, based on AIHW's advice:

- the requirement to report the Indigenous status of visiting staff was removed
- improvements to functionality have included pre-population of data where possible, built-in FTE calculators for the workforce section, and the ability for services to output their own data in an easy-to-use format (for example, Excel or Word, rather than XML).

The short time frame between the initial findings of the review being available to the Department in January 2019 and the roll-out of the HDP OSR collection in July 2019 did not allow for sufficient IT development time to address some issues. As such, the 2018–19 OSR collection included only a core set of elements—accreditation, client numbers, client contacts, episodes of care, workforce and CEO approval—and site level data was not collected in stage one. However, information about the location, days open, and whether 24 hour emergency care is provided are a priority for stage two.

The Department have indicated that the elements which will be collected in the future through the HDP will likely focus primarily on numeric data and are exploring other potential options for collecting additional information.

6.2 Impact of the move to the HDP

The move away from OCHREStreams and to the HDP has had a number of positive impacts. In particular:

- the number of organisations required to resubmit their nKPI data has decreased as a result of the in-built validation tools
- within the HDP, health services can benchmark their results against a self-defined comparator group, which should increase the usefulness of their own data
- increased engagement between the Department and health services has occurred through the HDP workshops and newsletters.

6.3 Data quality and technical issues

Review participants raised a number of issues during the review. Following completion of the review, the Department has confirmed that:

- the use of older versions of CIS systems is decreasing with direct load of data to the HDP
- to address the issues raised about the accuracy of definitions, specifications and ability of the in-built extraction tools to accurately capture data such as episodes of care, mapping documents have been prepared by each CIS vendor and made available to health services; and the main CISs have now been through multiple iterations of validation work and improved to a point where they are largely accurate
- OSR Recommendation 18 (work with vendors to provide a drill down function in the OSR extracts to assist services in identifying and investigating inconsistencies) has been marked as completed
- the capacity to report AUDIT-C now exists in all CIS.

6.4 Key priorities for moving forward

A workshop on progressing the findings from this review and other related Department-funded projects was held with HS DAG in December 2019. The following areas were highlighted as key initial priorities for moving forward:

- agreement on a clear governance framework for both collections
- development of an indicator selection and maintenance framework for the nKPI collection
- the need for an in-depth plan for the redevelopment of OSR content for the 2021 collection and beyond.

Three other findings from the review which would require more long-term development also received support. These were to consider:

- a revised and more relevant set of benchmarks for the nKPIs (that go beyond the trajectories in the national Implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan 2013–2023)
- potentially including two definitions of a regular client
- the development of core versus voluntary indicators for the nKPIs.

Appendix 1: Detailed overview of consultation methodology

In-depth interviews with stakeholders

The consultation phase of the review began with a series of in-depth, semi-structured interviews with a range of stakeholder groups including NACCHO and the NACCHO Affiliates, Indigenous specific primary health care services, Commonwealth departments, RACPG and software vendors. Table A1.1 highlights the key types of stakeholders identified for the review.

Table A1.1: Key types of stakeholders for the review

Stakeholder groups	Examples
Individual health organisations/health services including those in consortium	Community-controlled Non-community-controlled
Government departments	The Department PM&C (now NIAA) NT Health (NT KPI) AIHW
Peak bodies	NACCHO and Affiliates (including PHMO network) RACGP
National committees	HS DAG NATSIHSC Implementation Plan Advisory Group (IPAG)
Software vendors	Telstra Health Medical Director Best Practice Software ISA Healthcare Solutions

Figure A1.1 presents the process used to gather and analyse the information collected in this step.

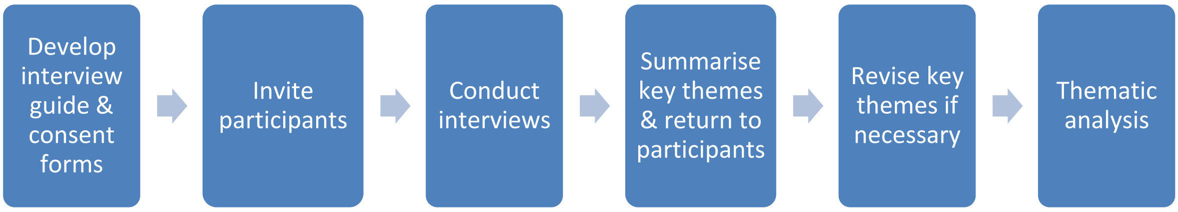

Figure A1.1: Overview of the in-depth interview process

A semi-structured interview guide for the consultations with services was developed with input from the Department. It was based on the project objectives and the literature review and included high-level open-ended questions around the five key themes (purpose, usefulness, collecting and reporting burden, content, and future development). That instrument was adapted for the interviews with the NACCHO Affiliates and government departments.

The CEOs of 20 selected organisations were informed of the review and invited to participate. Organisations decided on the staff members to be interviewed and whether the interviews would be conducted individually with staff or in a group setting. Prior to the interviews, the AIHW emailed consent forms and a set of high-level questions for consideration.

The same process was used to invite the members of the NACCHO Affiliates, the PHMOs, and an RACGP representative for consultations. The Department worked with the AIHW to identify key staff in the Department and in PM&C for interviews. Commonwealth staff were also provided with information sheets and consent forms.

Of the original 20 ISPHCS who were approached, 19 agreed to participate in site visits/in-depth interviews. Six additional ISPHCS were also included through a teleconference organised by an affiliate and two services requested telephone interviews.

The 27 health organisations that participated included community-controlled and non-community controlled organisations; urban, regional, remote/very remote; single and multi-site services; health organisations that received funds for a range of services and those that were funded for a single service; multiple member organisations and single organisations; and each of the four main clinical information systems (CIS).

Nearly all the interviews were conducted in person, one by skype, and several by telephone. The length of the interviews varied from approximately an hour for single participants to several hours with multiple participants. The interviews were recorded with participant consent.

After the interviews were completed, summaries of the main points were returned to the participants for their review, to make any changes, or to add any additional comments.

Altogether, interviews were held with 81 participants from 27 health services, 19 participants across all NACCHO Affiliates, 22 participants across three Commonwealth Departments (DoH, PM&C, AIHW) and four software vendors (Communicare, MMEX, MD, BP).

Individuals who participated in interviews included clinicians (GPs, nurses, midwives, Aboriginal health workers/practitioners, allied health professionals), CEOs, CQI coordinators, clinical service managers and data managers.

Online surveys of health organisations

The initial findings from the interviews were used to develop two online surveys (one each for the OSR and the nKPIs). Each survey contained forced-choice response questions and open-ended questions. All organisations that report to the OSR were sent an email about the survey with a direct link to it. All the affiliates were also sent a link. After the OSR survey was closed, the nKPIs survey was opened and the same process was used to invite participation.

The OSR survey took around 30 minutes to complete (if all questions were answered) and consisted of information about the respondent and the organisation, followed by questions around guiding principles for the OSR, its purpose, collection and reporting issues, how the OSR is aligned to other reporting requirements, the usefulness of the collection and suggestions for improvements. Respondents were asked questions about every item in the OSR: is the item important, useful at the organisation level, useful at a national level, needs changing or should be removed from the collection. A total of 70 OSR surveys were completed by 57 organisations reporting to the OSR.

The nKPIs survey took around 30 minutes to complete (if all questions were answered) and consisted of information about the participant and the organisation, followed by detailed questions around the purpose of the collection, the guiding principles for the collection, issues related to collecting and reporting of the nKPIs, how the items could be used for other reporting requirements, usefulness of the collection, specific questions about the definition of regular clients, trialling of the QLIK dashboard, and benchmarking, feedback on all 24 existing indicators (usefulness, need for change, suggested changes), suggested improvements to particular indicators, ideas about possible new indicators and suggestions for improvements to the content, collection and reporting of the nKPIs.

A total of 84 surveys were completed, and included responses from 62 different organisations reporting to the nKPIs.

Review workshops

All organisations reporting to the OSR and/or the nKPIs, NACCHO affiliates, and members of NATSIHSC were invited to attend one of five review workshops held in capital cities across Australia (Table A1.2).[50]

Table A1.2: Review workshops, location and number of participants

Location	Participation
Melbourne	7 participants from 3 services and VACCHO
Darwin	17 participants from 8 services and AMSANT
Sydney	17 participants from 11 services and RACGP
Perth	24 participants from 14 services, AHCWA, and WA Department of Health
Brisbane	32 participants from 21 services, AHCSA and QAICH
Total	97 participants from 56 services, 5 affiliates and the RACGP

The purpose of the workshops was to bring together members of different organisations to discuss the purpose of the two collections, how to make them more useful, and how to reduce the burden of reporting. The workshops also provided an opportunity for participants to discuss the specifics of each collection. For example, discussions around the OSR included whether to keep or drop specific modules, whether to keep/drop/modify individual items, and how it could be re-structured to better capture the characteristics and activities of the reporting organisations.

Similarly, discussions were held around the nKPIs (organised by theme, for example, maternal and child health, preventive health, and chronic disease management). Participants gave feedback on issues around each specific indicator, what was missing from the collection, what needed to be modified, and whether any could be eliminated.

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[50] Nous Group was engaged by the AIHW to assist in the Review by facilitating the workshops and writing up the output. At least two AIHW staff members attended all the workshops and also took notes.

Appendix 2: History of the OSR

The origins of the OSR can be traced back to 1997, when the Commonwealth provided $135.8 million to Aboriginal and Torres Strait Islander primary health and substance abuse services. The first annual Service Activity Reporting (SAR) questionnaire was sent to the primary health care services receiving that funding in 1998 (VAHS 2018). Drug and alcohol services and Bringing Them Home and Link Up services were added in 2007–08. The collections up to that point were managed by the Department and NACCHO.

In 2009, the aim of reducing reporting burden and improving timeliness led to a streamlined paper-based report to capture data for all 3 collections. This combined collection became known as the Office for Aboriginal and Torres Strait Islander Health (OATSIH) Services Reporting collection (OSR), and management of the collection was given to the AIHW. Additional reporting requirements for SEWB and New Directions services were added later.[51]

The original collection was *'an administrative, service level data collection with the primary purposes of providing information needed to:*

- *Profile the work of the DoH funded health services*
- *Satisfy government accountability requirements related to the activities of services*
- *Identify key issues affecting Indigenous primary health care services*
- *Identify gaps in Aboriginal and Torres Strait Islander services*
- *To inform various publications and national reporting such as 'the National Aboriginal and Torres Strait Islander Health Performance Reporting; COAG reporting and DOHA/OATSIH annual reports (Lewis 2011)'*.

The reporting method changed in 2012, from paper-based to online reporting with organisations submitting data through a web-based portal called OCHREStreams, which was maintained by a third-party provider, the Improvement Foundation (IF). The structure and content of the OSR was last revised for the 2012–13 collection, following a review by Don Lewis and Edward Tilton (2012).[52] The major structural change was the move to a module-based approach.

On 31 October 2018, the contract between the Department and the IF concluded, as the Department moved to its in-house HDP as the reporting mechanism for both the OSR (in July 2019) and the nKPIs (in January 2019).

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[51] After a restructure where the functions of OATSIH were split between Health and PM&C, the OSR was renamed the Online Services Report (to reflect the method of reporting).

[52] Governance over the structure and content of the OSR rests with the Department. According to the OSR and NKPIs for Aboriginal and Torres Strait Islander primary health care data framework (Department of Health 2015, p.8), "any changes to OSR will be subject to the Department of Health's approval in consultation with relevant stakeholders, such as those listed above" (which includes NACCHO, advisory groups, technical experts, health organisations, the AIHW, PM&C, and other relevant stakeholders).

Appendix 3: History of the nKPIs

The origins of the nKPIs are found in the 2008 National Indigenous Reform Agreement (NIRA), which formed part of the broader Closing the Gap agenda. As part of schedule F, regarding data quality improvements, the agreed upon action was that:

> *'The Commonwealth Department of Health and Ageing, in partnership with State and Territory health departments and in collaboration with AIHW, will develop national Key Performance Indicators for Indigenous specific primary health care services: A coordinated data collection is also planned'.* (COAG, 2008 p. F–74)

NIRA stipulated that the approval of data elements be sought through the National Health Information Agreement governance process: consultation and endorsement from relevant committees such as NAGATSIHID, NIHSSC, NEHIPC and AHMAC. This includes decisions about which indicators are included, their technical specifications, approval for changes to existing indicators, the development of new indicators and a requirement that specifications for the indicator set be hosted on METeOR, the AIHWs Metadata Online Registry. Under the funding agreement between the Department and the AIHW, it was AIHW's responsibility to drive this process.

Purpose

The NIRA did not discuss the specific purpose of the collection. An articulation of the purpose of the collection was given in an OATSIH discussion paper from January 2011: '*National Key Performance Indicators (KPIs) are being developed to monitor, inform, and provide a direct line of sight between:*

1. the activities *of Commonwealth and State and Territory funded organisations that provide primary health care to Aboriginal and Torres Strait Islander peoples; and*
2. *the Council of Australian Governments' (COAG) Closing the Gap targets, in particular the targets for* life expectancy and child mortality.'

An early presentation of the Technical Working Group provided further detail, stating that '*the national KPIs are intended to:*

- *indicate the major health issues pertaining to a PHC organisation's client population (especially those of maternal health, early childhood and the detection and prevention of chronic diseases);*
- *outline the extent to which government funded Indigenous-specific PHC organisations collect, record and review pertinent data on these issues; and*
- *reveal changes in health risks or outcomes that may be driven by the quality of care that government funded Indigenous-specific PHC provide to their clients*'.

These purposes are included in the specifications of the current nKPIs dataset, held on METeOR.

Like its predecessor, Healthy for Life, the nKPIs is also expected to provide the evidence base to support continuous quality improvement (CQI) activities of health services. The approach adopted by Healthy for Life for CQI and service development, which also extended to the nKPIs, is the Plan-Do-Study-Act (PDSA) cycle, a model that allows health services to assess their present service delivery, plan changes, implement changes and then reassess their progress. This cycle allows ongoing improvements over time, with the ultimate aim of improving health outcomes for clients. The model also allows for improvements to specifically meet the needs identified by individual services and can be directed at improving the priority health outcomes for those services.

There is an expectation that primary health providers participate in quality improvement activities, as reflected by the presence of a quality improvement module within the standards against which general practices are accredited (RACGP 2017). There is also evidence that CQI activities have a positive effect on chronic disease care delivery and outcomes in the Indigenous health care setting (Stoneman et al. 2014).

A National CQI Framework for Aboriginal and Torres Strait Islander Primary Health Care has been developed by the National Aboriginal Community Controlled Health Organisation and the Aboriginal Community Controlled Health Organisation Affiliates with support from the Department to support CQI within services (NACCHO 2018).

Development

The development of the nKPIs began in 2010 and received in-principle approval from AHMAC in 2011. As individual indicators were finalised, the indicators and their data specifications were approved and endorsed by the National Health Information Standards and Statistics Committee (NHISSC), the National Health Information and Performance Principal Committee (NHIPPC) and AHMAC between 2011 and 2015.

A Technical Working Group, chaired by the Department, oversaw the development of the indicators and their specifications. This work was informed by an AIHW examination of existing indicator sets and their relationship to frameworks including the Health Performance Framework. The indicator sets included the:

1. Northern Territory Aboriginal Health KPIs
2. QAIHC Core Indicators
3. Healthy for Life (HfL) Essential Indicators
4. Australian Primary Care Collaborative.

An initial set of 17 indicators was later expanded to the current set of 24. It was agreed that there would be six-monthly reporting periods (June and December). A staged approach was used for phasing in the collection, beginning in June 2012 after an initial trial involving organisations with previous data collection experience.

The nKPIs began with 90 organisations that had participated in the Healthy for Life program, a continuous quality improvement program for organisations providing care to Indigenous Australians, funded by the Australian Government.[53] Eleven indicators were included in the first collection, and all 24 were collected for the first time in the December 2017 collection.

As with the OSR, reporting to the nKPIs is a contractual obligation for organisations receiving IAHP PHC or New Directions (ND) funding. While a broad range of organisations receive IAHP funding, representing diverse models of care, the review has been unable to identify any formal process of negotiation between grants managers and organisations as to which indicators should be reported against. This means that organisations who only receive ND funding for maternal and child health services are required to report against all 24 indicators.

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[53] More details about all aspects of the collection are provided in the National Key Performance Indicators for Aboriginal and Torres Strait Islander primary health care: results for 2017 report (AIHW 2018).

Whether organisations with multiple sites report at the site level or at an organisational level is also determined by their individual funding agreements, and thus there may be variation in reporting requirements between organisations with similar characteristics.

Appendix 4: List of indicators in the nKPIs

national Key Performance Indicators
PI01: Proportion of Indigenous babies born within the previous 12 months whose birthweight has been recorded
PI02: Proportion of Indigenous babies born within the previous 12 months whose birthweight results were low, normal or high
PI03: Proportion of regular clients for whom an MBS Health Assessment for Aboriginal and Torres Strait Islander People (MBS item 715) was claimed
PI04: Proportion of Indigenous children who are fully immunised
PI05: Proportion of regular clients with type 2 diabetes who have had an HbA1c measurement result recorded
PI06: Proportion of regular clients with type 2 diabetes whose HbA1c measurement result was within a specified level
PI07: Proportion of regular clients with a chronic disease for whom a GP Management Plan (MBS item 721) was claimed
PI08: Proportion of regular clients with a chronic disease for whom a Team Care Arrangement (MBS item 723) was claimed
PI09: Proportion of regular clients whose smoking status has been recorded
PI10: Proportion of regular clients with a smoking status result
PI11: Proportion of regular clients who gave birth within the previous 12 months with a smoking status of 'current smoker', 'ex-smoker' or 'never smoked'
PI12: Proportion of regular clients who are classified as overweight or obese
PI13: Proportion of regular clients who had their first antenatal care visit within specified periods
PI14: Proportion of regular clients aged 50 and over who are immunised against influenza
PI15: Proportion of regular clients with type 2 diabetes or COPD who are immunised against influenza
PI16: Proportion of regular clients whose alcohol consumption status has been recorded
PI17: Proportion of regular clients who had an AUDIT-C with result within specified levels
PI18: Proportion of regular clients with a selected chronic disease who have had a kidney function test
PI19: Proportion of regular clients with a selected chronic disease who have had a kidney function test with results within specified levels
PI20: Proportion of regular clients who have had the necessary risk factors assessed to enable CVD assessment
PI21: Proportion of regular clients aged 35 to 74 who have had an absolute cardiovascular disease risk assessment with results within specified levels
PI22: Proportion of regular clients who have had a cervical screening
PI23: Proportion of regular clients with type 2 diabetes who have had a blood pressure measurement result recorded
PI24: Proportion of regular clients with type 2 diabetes whose blood pressure measurement result was less than or equal to 130/80 mmHg

Appendix 5: Summary of OSR uses and issues identified in the review

Appendix 5 contains an item-by-item summary of uses and issues in the OSR identified throughout the review. It is based on the 2017–18 OSR instrument.

Organisation profile: These data items are completed by ALL organisations in the OSR						
Data item	**Question**	**Type**	**How used**	**By**	**Comments/issues**	**Options to consider**
Contact details, for example, name, address, phone, email	P-1	text	Follow up	AIHW	All needed?	Just name, phone, and email enough
Service delivery purpose	P-2a	tick-box			Similar info in masterlist. (MI)	Derive from MLor other source
Governance model	P-2b	tick-box	National report	DoH, NACCHO, AIHW	Small changes year to year.	Pre-populate from previous year or derive from ML
Smoke free workplace/policies	P-3	tick-box			Is it used/useful?	Remove
Staff access to smoking cessation resources	P-4	tick-box			Is it used/useful?	Remove
Service delivery sites (for each site: name & address)	P-5a/5b	text	To derive remoteness based on where a service is provided and geospatial work (address geocoded).	AIHW	High reporting burden for services with more than 1 site.	Pre-populate from previous year

Organisation profile: These data items are completed by ALL organisations in the OSR						
Data item	**Question**	**Type**	**How used**	**By**	**Comments/issues**	**Options to consider**
Service delivery sites (for each site: services provided, days open, emergency care)	P-6/7a/7b/8	tick-box	To derive no. of sites by type of service provided. Geospatial work National reporting	AIHW	High reporting burden for services with more than 1 site. Only up to 11 sites can be included. SU services fill out P-8 while PHC services P-7a, so can be confusing for services funded for both. Contextual info only—no link to actual clients at the site level for those with more than 1 site.	Reduce burden by combining with P-7a and pre-populating based on previous year. Services could check and only update if necessary.

Health promotion/ corporate services & infrastructure/advocacy, knowledge and research/ policy and planning/community engagement, control and cultural safety/ feedback & reporting effort/ CEO approval. These data items are completed by ALL organisations in the OSR						
Data item	**Question**	**Type**	**How used**	**By**	**Comments/issues**	**Options to consider**
Health promotion (number of group activity sessions in the last year)	HP-1a	numeric	National report RoGs, HPF	AIHW	Does give a measure of the other (non-clinical) work done by a service. Can be hard to collate (respondent burden) and there is no link to how many clients attend sessions. Also, the question as to whether all types of group activities are covered for example, substance use?	Investigate the possibility of auto-extracting this data. Need consistency across systems and no double counting across groups. Consider adding to the type of groups reported on.
Health promotion an estimate	HP-1b	tick-box/text				Data quality indicator.
Health promotion (programs and activities run in last year)	HP-2	tick-box	National report HPF	AIHW	No explicit link between the health promotion activities ticked and no. of group activity sessions reported.	More explicit link between health promotion activities (type of activity and no. of sessions/clients) may be more useful.
Workforce (AHWs paid by the org by highest qualification)	W-1	numeric	National report	AIHW	Is it used/useful? Excludes AHP and doesn't cover all AHW, just those with certificate level qualification. Doesn't collect the number without any qualification.	Review or remove.
FTE paid by the org by position type and whether Indigenous or other	W-2	numeric	Adhoc data requests (DoH), ROGs, HPF, geospatial work, National report	DoH, AIHW, ACCHO	Useful data item (for example, rate per 1,000 clients across services) but high reporting burden. Can be confusing for services (for example, asked to report on all staff) and some services have difficulty working out FTE. Not all services can report in the same way because it would inflate the data (for example, brokerage services and large mainstream services funded to provide a specific type of service). Doesn't collect non-Indigenous explicitly, just Aboriginal and Torres Strait Islander & other.	Better align with contacts question. Add a tool (FTE calculator) to the portal to make calculation easier Consider only collecting health related positions

Health promotion/ corporate services & infrastructure/advocacy, knowledge and research/ policy and planning/community engagement, control and cultural safety/ feedback & reporting effort/ CEO approval.

These data items are completed by ALL organisations in the OSR

Data item	Question	Type	How used	By	Comments/issues	Options to consider
Vacant staff (FTE and weeks vacant) by position type	W-3	numeric	National report HPF	AIHW		
FTE not paid for by the org (i.e. visiting staff) by position type and whether Indigenous or other	W-4	numeric	Adhoc data requests (DoH), HPF, geospatial work, National report	DoH, AIHW, ACCHO	High reporting burden as can be difficult to work out FTE for visiting staff that only visit for a short time. Increases the time it takes to process/analyse data for a couple of hundred FTE each year (n.b. GPs and specialist staff more likely to be visiting). Does not collect non-Indigenous explicitly, just Aboriginal and Torres Strait Islander & 'other'.	Consider if data is necessary or whether can be combined with W-2. Could just include total staff for selected categories? Better align with contacts question. Do you need Indigenous status for visiting staff? Clearer instructions, for example, for brokerage/mainstream services. Add a tool (FTE calculator) to the portal to make calculation easier
Information and communications (IT systems, communications technology used and how functional)	ICT-1 & 2	tick-box			Not used in any reporting. Out of date	Review or remove.
Accreditation (RACGP, organisational accreditation)	AC-1a/2a	tick-box/text	Adhoc data requests (DoH), National report HPF	DoH, AIHW	Little change from year to year.	Pre-populate from previous year. Services could check and only update where necessary.
Advocacy (individual/community level by type of activities)	Ap-1a	tick-box			Is it used/useful? Broad concepts open to interpretation and reveal little about service activity. Doesn't really tell you much, for example, if a service ticks they advocate for the health of individual clients and at the local community level in AP-1a and then tick housing and homelessness in AP-1b it's not clear if they do both types of advocacy for housing and homelessness.	Review or remove. Combine questions AP-1a and 1b? Add more specific examples of the types of advocacy you want to know about

Health promotion/ corporate services & infrastructure/advocacy, knowledge and research/ policy and planning/community engagement, control and cultural safety/ feedback & reporting effort/ CEO approval.

These data items are completed by ALL organisations in the OSR

Data item	Question	Type	How used	By	Comments/issues	Options to consider
Knowledge and research (contribution in last year)	Ap-2a/b	tick-box			Is it used/useful? No detail about what is done. Adds to reporting burden but does not give a lot of information.	Review or remove.
Planning and policy (activities in last year)	Ap-3	tick-box	RoGS, HPF	AIHW	Is it used/useful? Risk of just agreeing they do things.	Review or remove. To keep consistent with other questions should report for the previous year, not 'routinely involved in'.
Governance (for example, committee or board/ times met/income and expenditure statements % board Indigenous, training, independent skills based members)	AG-1 to 6	tick-box/numeric	National report HPF	AIHW	Most not used, for example, how often board met, whether income and expenditure statements presented to the board on at least two occasions and if board members receive training to assist in their role, and does board include independent (skills based) members?	Review or remove. Add sequencing if kept.
Cultural safety (policies/processes & health related services in place)	CC-1 & 2	tick-box	HPF (CC-2 only) Cultural safety framework (AIHW 2019b)		Is it used/useful?	If seen as important can develop the module further to collect more useful info.
Feedback (top 5 health gaps and challenges–tick box)	F-1 & F2	tick-box	National report HPF	AIHW	Viewed as important data but issues with the way it is currently collected. Very open to interpretation of the person filling out the form. Hard to know whose view it represents. The list is not comprehensive. Encourages services to pick 5 which is fairly arbitrary (what happens if a service only has 1 or 2 gaps or wants to report 6?). There is also no rank attached which makes it hard to analyse and make sense of the data, for example, we can't say what is the most common gap or challenge only that it is in their top five.	Consider getting services to rank and be allowed to report on as many as are applicable. Adding a 'none of the above' option so we know how many services feel they don't have gaps or challenges would be useful. Consider barriers and enablers. Gaps in terms of need in the community and gaps in terms of service provision, for example, what could do with funding.

Health promotion/ corporate services & infrastructure/advocacy, knowledge and research/ policy and planning/community engagement, control and cultural safety/ feedback & reporting effort/ CEO approval. **These data items are completed by ALL organisations in the OSR**						
Data item	**Question**	**Type**	**How used**	**By**	**Comments/issues**	**Options to consider**
Reporting effort	B1-3				Is it used/useful?	For completeness include a category 'unable to answer' rather than making questions optional?
CEO approval (whether agree to release data to NACCHO, state or territory affiliate and if activities in action plan been carried out)	A-1 to 4	tick-box			Not clear what A-4 data is used for and by whom—contract managers? Important to include in the portal. CEO sign off and who the service is prepared to share their data with.	Should it also outline who will have access to service level data and for what purpose?

Clinical services: These data items are completed by those funded by the DoH for primary health						
Data item	**Question**	**Type**	**How used**	**By**	**Comments/issues**	**Options to consider**
Episodes of care (number by Indigenous status and gender)	CS-1a	numeric	Adhoc data requests (DoH), ROGs, HPF, National report	DoH, AIHW, ACCHO	Key data item. Now used in the funding model. Issues/confusion around definition and what should be included/excluded in the count, for example, what do we mean by clinical eoc? Still some questions around data quality and whether there is consistency in extracted data across the different CISs and between manual submitters and what the relationship to the contacts count should be.	Need agreement on definition and clearer specifications (what contact types are included) and what position types are included (for example, what can be counted in other health). Mapping across different CISs compared and checked against the agreed definition. Need to ensure group activity contacts are not included in counts.
Eoc an estimate	CS-1b	tick-box/text			Not widely used but useful data quality indicator/contextual info.	
Client contacts (number by type of health worker, Indigenous status and gender) + transport contacts	**CS-2**	numeric	Adhoc data requests (DoH), ROGs, HPF, National report	DoH, AIHW, ACCHO	Key data item. Issues/confusion around definition and what should be included/excluded in the count, for example, sometimes non-clinical service contacts may get included (for example, child care/aged care workers in Communicare other health contacts). Not all contacts may be extracted and services have to manually add work done by some workers. Questions around whether there is consistency in extracted data across different CISs and between manual submitters and what the relationship to the episodes count should be.	Need agreement on definition and clearer specifications, particularly, 'other health/clinical staff' is an unclear category. Mapping across different CISs compared and checked against the agreed definition. Need to ensure group activity contacts are not included in counts.

Clinical services: These data items are completed by those funded by the DoH for primary health

Data item	Question	Type	How used	By	Comments/issues	Options to consider
Clients (number by Indigenous status and gender)		numeric	Adhoc data requests (DoH), HPF, National report	DoH, AIHW, ACCHO	Key data item. Different purpose/definition than nKPIs (all clients v's regular clients) and OSR also collects non-Indigenous clients. Some mainstream services need to report on funded work only, otherwise would inflate data (for example, hospitals). Data should exclude a client if they just attend a group activity, but it is not clear this always happens. Some confusion over who should be included in the count, for example, need to exclude non-clinical service clients (for example, social service clients). Possible consistency issues over what is extracted across the different CISs.	Need agreement on definition and clearer specifications. Want to continue to report all clients? Mapping across different CISs compared and checked against the agreed definition. Need to ensure group clients only are excluded from counts.
Client no. an estimate	CS-3b	tick-box/text			Not widely used but useful data quality indicator/contextual info.	
Clinical activities (MBS 715 adult health checks 25 years plus/alternative adult health checks 25 years plus/ MBS 721 CDMPs/alternative CDMPs)	CS-4	numeric			This data has not been reported on nationally and does not appear to be used. A lot of variation overtime within a service and between systems. Different purpose/definition than nKPIs (count of checks v's count of clients) which can cause confusion. In theory should the number of health checks (Medicare item 715) only include Indigenous counts? At the moment the form asks for non-Indigenous counts as well.	Review or remove. Are there other more reliable sources of this information? If it remains need agreement on definition and clearer specifications and mapping for the different CISs need to be compared and checked against the definition
Access to specialist, allied health and dental services (onsite/offsite rating 0-3)	CS-5a	tick-box	National report RoGS	AIHW	Yes/no response, so while it gives an indication of whether access to a service is available on or off site, there is no info on how many clients make use of these services. Level of access info interesting but opinion based.	Reduce burden by pre-populating based on previous year? Services check and update the rating score.

Clinical services: These data items are completed by those funded by the DoH for primary health						
Data item	**Question**	**Type**	**How used**	**By**	**Comments/issues**	**Options to consider**
Current estimated waiting time (weeks) for dental services	CS-5b	numeric			Useful? Why just asks for waiting time for first routine appointment?	Remove.
Social and Emotional Wellbeing issues & services (in terms of staff time and organisations resources) and whether provide services to Stolen Generation members	CS-6a/b/c	tick-box	National report	AIHW	Only collected for orgs funded for phc so orgs just funded for SEWB will not answer this, yet services funded for phc + SU have to answer it twice. Orgs asked to select up to 5 but these are not ranked so does not give all issues and it is not clear which are the most important 1 or 2.	Review. Services could rank and report on as many as are applicable. Analysis of 'other' responses to add to the list of categories. Add a 'none of the above/not applicable' option to count services that do not feel they have SEWB related issues. Ask of all organisations for completeness and to avoid duplication.
Substance use issues & services (in terms of staff time and organisations resources)	CS-7a/b	tick-box	National report	AIHW	Orgs funded for phc+SU have to answer twice. Asked to select up to 5 but these are not ranked so does not give all issues and it is not clear which are the most important 1 or 2	Review. Services could rank and report on as many as are applicable. Analysis of 'other' responses to add to the list of possible categories. Add a 'none of the above/not applicable' option to count services that do not feel they have SU related issues. Ask of all organisations for completeness and to avoid duplication.
Clinical or Health related services, for example, pharmaceuticals, aged care, disability, palliative care, continuity of care	CS-8	tick-box	National report HPF	AIHW	Useful/used? Does it cover all areas of interest? Not linked to clients getting these types of services.	Reduce burden by pre-populating from previous year. Services check and update if necessary.
Continuity of care	CS-9	tick-box	National report	AIHW	Useful/used? Does it cover all areas of interest? Not linked to clients getting these types of services.	Reduce burden by pre-populating from previous year. Services check and update if necessary.

Clinical services: These data items are completed by those funded by the DoH for primary health						
Data item	**Question**	**Type**	**How used**	**By**	**Comments/issues**	**Options to consider**
Maternal and child health (number of child health checks, alternative child health checks)	MCH-1	numeric	National report	AIHW	Slightly different definitions with nKPIs can cause confusion (OSR is a count of checks not clients). Also the difference between a MBS check and an alternative check. Data variability at the service level over time and questions over consistency in what is extracted for the different CISs. Are there other more reliable sources of data available? Healthy kids check no longer rebateable.	Review or remove. If kept need agreement on definition and clearer specifications and mapping for the different CISs needs to be compared and checked against the definition.
Maternal and child health (number of women attending antenatal care and antenatal visits)	MCH-2	numeric	National report	AIHW	Consistency over what is extracted for the different CISs. Part of the antenatal picture is provided by OSR and part by nKPIs.	Develop a more integrated MCH module
Maternal and child health group activities (number of sessions conducted and % activity under ND funding)	MCH-3	tick-box and numeric	National report	AIHW	% activity under ND funding may be hard to estimate. Is it used/useful? No link to how many clients attend these sessions.	
Effective antenatal shared care arrangements with local hospitals	MCH-4	tick-box			Subjective—what does 'effective' mean?	Review or remove

SOCIAL AND EMOTIONAL WELLBEING PROGRAM: These data items are completed by organisations funded by PM&C for SEWB support services						
Data item	**Question**	**Type**	**How used**	**By**	**Comments/issues**	**Options to consider**
Working arrangements (MOUs) and who with	SE-1	tick-box			Is it used/useful?	Remove
Counsellors (FTE, training, vacancies)	SE-2	numeric	National report	AIHW	Not clear what is meant by the term counsellor. Some services get confused over whether to report funded counsellor positions, funded SEWB positions or all SEWB positions in the service.	Review. Need agreement on definition and clearer specifications.
For each counsellor funded by SEWB program (Indigenous status, FTE, gender, police check, qualifications, field of study)	SE-3	tick-box			High respondent burden. Is it used/useful?	Review or remove
Formal training during the year	SE-4	tick-box & text	National report	AIHW	High respondent burden. Is it used/useful?	Review or remove
Counsellor vacancies	SE-5	tick-box & text	National report	AIHW	Duplication with the workforce section.	Review or remove
Clients (by Indigenous status and gender)	SE-6	numeric	National report	AIHW	High burden as not auto-extracted across all CISs. Many sewb services cannot report stolen generation clients so most fall into 'other Indigenous' group. Should exclude a client if they just attend a group, but not clear this always happens so possible consistency issues between services. Possible duplication in reporting with other collections.	Review or remove. Remove the generation breakdown and make similar to contacts breakdown. If kept develop direct load.
Contacts (number by Indigenous status and gender)	SE-7	numeric	National report	AIHW	High burden as not auto-extracted across all CISs. Data should exclude a client if they just attend a group activity, but it is not clear this is always happening so possible consistency issues between services. Possible duplication in reporting with other collections.	Review or remove. If kept develop direct load.

SOCIAL AND EMOTIONAL WELLBEING PROGRAM: These data items are completed by organisations funded by PM&C for SEWB support services						
Data item	**Question**	**Type**	**How used**	**By**	**Comments/issues**	**Options to consider**
Completed reunions SEWB funded counsellors involved in	SE-8	numeric			Is it used/useful? Possible duplication in reporting with other collections.	Review or remove
SEWB funded counsellors activities (time spent on counselling, groups, admin & outreach etc)	SE-9	numeric	National report	AIHW	Is it used/useful?	Review or remove
Support for counsellors (internal/external supervision, type of support, how often)	SE-10/11/12	tick-box	National report	AIHW	Is it used/useful?	Review or remove
Group activities run by SEWB counsellors	SE-13	tick-box	National report	AIHW	Collected for SEWB support orgs only, not Link Up.	Collect as part of health promotion.
Coverage and outreach	SE-14	Text			Is it used/useful? Text based response not analysed.	Review or remove

Modules—Link Up. These data items are completed by organisations funded by PM&C for Link Up services.

Data item	Question	Type	How used	By	Comments/issues	Options to consider
Working arrangements (MOUs) and who with	L-1a	tick-box			Is it used/useful? Available from a different source?	Remove
Counsellors (FTE)	L-2	numeric	National report	AIHW	Not clear what is meant by the term counsellor. Some services get confused over what to report.	Need agreement on definition and clearer specifications.
For each counsellor funded by SEWB program (Staff type, Indigenous status, FTE, gender, police check, qualifications, field of study)	L-3	tick-box	National report	AIHW	High respondent burden. Is it used/useful?	Review or remove
Formal training during the year	L-4	tick-box & text	National report	AIHW	High respondent burden. Is it used/useful?	Review or remove
Counsellor vacancies	L-5	tick-box & text	National report	AIHW	Duplication with the workforce section.	Review or remove
Clients (by Indigenous status and gender, stolen generation)	L-6	numeric	National report	AIHW	Data should exclude a client if they just attend a group activity, but it is not clear this always happens. Possible consistency issues between services. If a service provides SEWB support and Link Up services it isn't clear what services are reporting both in this module. Confusion over if they should report both.	Develop direct load?

Modules—Link Up. These data items are completed by organisations funded by PM&C for Link Up services.

Data item	Question	Type	How used	By	Comments/issues	Options to consider
Contacts (number by Indigenous status and gender)	L-7	numeric	National report	AIHW	Data should exclude a client if they just attend a group activity, but it is not clear this is always happening. Possible consistency issues between services. Question wording leads to confusion. L-6 (also SE-6 & SE-7) refers to funded counsellors, while L-7 refers to organisation level. In practice we suggest services only report for funded counsellors so data in SE-6 and SE-7 could be linked to look at average number of contacts per client. Data should exclude a client if they just attend a group activity, but it is not clear this is always happening	Need agreement on definition and clearer specifications.
Assisted reunions completed during the year	L-9	numeric			Is it used/useful? Possible duplication in reporting with other collections.	Review or remove
Staff time spent on counselling, groups, admin & outreach etc.	L-8	numeric	National report	AIHW	Is it used/useful?	Review or remove
Support for counsellors (internal/external supervision, type of support, how often)	L-10/11/12	tick-box	National report	AIHW	Is it used/useful?	Review or remove
Coverage and outreach	L-13	Text			Text based response so not really analysed.	Review or remove

Modules—Stand-alone substance use. These data items are completed by ALL organisations funded by PM&C for substance use services. Note the term stand-alone causes confusion and is not correct.

Data item	Question	Type	How used	By	Comments/issues	Options to consider
Settings	S-1	tick-box	National report	AIHW	Useful for validation and providing a count by orgs by type of SU service provided. Some services struggle to work out what to tick and don't tick all that apply.	Review
Treatment types	S-2	tick-box	National report	AIHW	Is it used/useful?	Review
Treatment models (primary method or model used by counsellors)	S-3	tick-box	National report	AIHW	Is it used/useful?	Review
AOD programs/activities	S-4	tick-box	National report	AIHW	Does the list cover all SU programs and activities of interest? Not linked to the number of clients getting these types of services.	Review
Referral sources	S-5	tick-box	National report	AIHW	Is it used/useful? Not linked to the number of clients referred.	Review
Total clients (number by Indigenous status and gender)	S-6	numeric	National report	AIHW	Useful to help validate other su counts. High burden as not auto-extracted across all CISs. Can be difficult to collate as clients should be counted only once, regardless of how many SU services they receive and group activities should be excluded.	Review
Residential treatment (number of clients by Indigenous status, age and gender)	S-7a	numeric	National report	AIHW	High burden. Are the broad age groups useful/necessary? Some services struggle to get data in S-7a & b to match. Instruction on how to treat length of stay for clients still in rehab on the census day is missing. Possible duplication in reporting with other collections.	Review the structure/content of the SU module. Services not providing residential care should be sequenced around these questions. Need agreement on definition and clearer specifications.

Modules—Stand-alone substance use. These data items are completed by ALL organisations funded by PM&C for substance use services. Note the term stand-alone causes confusion and is not correct.						
Data item	**Question**	**Type**	**How used**	**By**	**Comments/issues**	**Options to consider**
Residential treatment (length of stay in weeks by gender)	S-7b	numeric	National report	AIHW	High burden. Are the broad age groups useful/necessary? Some services struggle to get data in S-7a & b to match. Instruction on how to treat length of stay for clients still in rehab on the census day is missing.	Review
Residential treatment (number of episodes of care by Indigenous status, age and gender)	S-7c	numeric	National report HPF	AIHW	High burden. Are the broad age groups useful/necessary? Possible duplication in reporting with other collections.	Review
Sobering up /respite /short term care (number of clients by Indigenous status, age and gender)	S-10	numeric	National report	AIHW	Are the broad age groupings useful/necessary? This data should exclude those attending groups only but isn't clear this is always the case. Possible duplication in reporting with other collections.	Review the structure/content of the SU module. Services not providing sobering up care should be sequenced around these questions. Need agreement on definition and clearer specifications
Sobering up /respite /short term care (number of episodes of care by Indigenous status, age and gender)	S-11	numeric	National report HPF	AIHW	Are the broad age groupings useful/necessary? This data should exclude those attending groups only but isn't clear this is always the case. Possible duplication in reporting with other collections.	
Total beds/ residential places at the organisation	S-12	numeric			Not clear purpose of collecting this data or who uses it. Possible duplication in reporting with other collections..	Review
Non-residential/follow-up /aftercare (number of clients Indigenous status, age and gender)	S-13	numeric	National report	AIHW	Are the age groupings useful/necessary? Seem broad. This data should exclude those attending groups only but isn't clear this is always the case. Possible duplication in reporting with other collections.	Review the structure/content of the SU module. Services not providing non-residential care should be sequenced around these questions. Need agreement on definition and clearer specifications
Non-residential/follow-up /aftercare (number of episodes of care by Indigenous status, age and gender)	S-14	numeric	National report HPF	AIHW	Are the age groupings useful/necessary?	Review

Modules—Stand-alone substance use. These data items are completed by ALL organisations funded by PM&C for substance use services. Note the term stand-alone causes confusion and is not correct.

Data item	Question	Type	How used	By	Comments/issues	Options to consider
Substance use issues (most important 5 in terms of staff time and organisational resources)	S-15	tick-box	National report	AIHW	Orgs asked to select up to 5 but these are not ranked, so does not give all issues and it is not clear what are the most important one or two. Services funded for phc + SU have to answer this question twice.	Review. Services could rank these and be allowed to report on as many as are applicable only. Analysis of 'other' responses could be done to add to the list of possible categories. For completeness adding a 'none of the above/not applicable' option would allow us to know whether any services feel they don't have SU related issues. Could be asked of all organisations to avoid duplication for some services.
Social and emotional wellbeing issues (most important 5 in terms of staff time and organisational resources)	S-16	tick-box	National report	AIHW	Services funded for phc + SU have to answer this question twice. Orgs asked to select up to 5 but these are not ranked so does not give all issues and it's not clear which are the most important one or two.	Review. Services could rank these and be allowed to report on as many as are applicable only. Analysis of 'other' responses could be done to add to the list of possible categories. For completeness adding a 'none of the above/not applicable' option would allow us to know whether any services feel they don't have SU related issues. Could be asked of all organisations to avoid duplication for some services.
SEWB specialist and allied health workers the organisation provides access to (on site /off site level of access)	S-17	tick-box			Is it used/useful? Not currently analysed.	Review

Appendix 6: Initial feedback on OSR redevelopment (2018)

Essential to retain	Requires data development		Potentially remove from collection
	Short term	Long term	
Organisation profile Governance model Service delivery model Accreditation (AC-1a/2a) Should be pre-populated and/or be drawn from HDP	P-5—Service delivery site – improve guidelines and consistency AP CC AG Review in context of I.P./CtG updates and cultural safety dashboard work		P-3/4—Smoke free workplace CS-4 & MCH-1—MBS items – fix nKPIs to include all age groups and investigate capturing comprehensive MBS data using HCP report CS-5b—Dental waiting times – important but poor quality and not analysed MCH-2—Antenatal data – very similar to nKPI PI13. Remove and consider adding 'number of antenatal visits/client' indicator. B-1/2/3—Burden of reporting – important concept but not well captured/analysed/utilised W-1—AHW highest qualification ICT-1/2—CIS captured by HDP. Otherwise unutilised data.
Clinical services • CS-1—episodes of care • CS-2—client contacts • CS-3—examine improving consistancy with nKPIs by reporting → • CS-6/7/8—types of services delivered – retain but improve • CS-9—Continuity of care • MCH-3—Antenatal group activities • MCH-4—Antenatal shared care	Regular clients by Indigenous status?	CS-6a/6b—data development on capturing volume of diagnosis in client population CS-6c/7a/7b—review to investigate quantify items	
SEWB/Link-Up/Substance use—PM&C • Essential to establish purpose of services reporting via two mechanisms • Substance use data should be aligned with NMDS or services should report to same • Link-Up data is only administrative dataset regarding Stolen Generations →			PM&C modules are consistently reported as being high burden, and while some recognise the value that this data is captured, it is currently underutilised. Unless justified they should be removed or significantly streamlined.
Workforce—remove from corporate services into own section	• W-2/4 presented together, side-by-side • Category alignment between FTE/contacts • Integrated FTE calculator • Review position types for current sector relevance • Consider removing 'outreach' worker – difficult to quantify FTE	• W-3—Vacant staff positions, develop item to capture whole of year vacancy rather than point of time • Ensure alignment as progress made on development of Workforce strategy/plan • Improve specification/ease of reporting	
Health Promotion – HP-1a/1b →	→		

Appendix 7: Possible OSR restructure (2018)

Appendix 7 contains a draft of an initial possible OSR restructure developed by the AIHW and provided to the Department in November 2018. It was based on a mixture of feedback from the consultations, the online survey, and a meeting with the Department in October 2018. It was developed based on the principles of reducing reporting burden through streamlining of the OSR instrument itself, pre-populating fields, reducing duplication between the OSR and other reporting requirements (so that information is entered once into the OSR and extracted for other purposes), restructuring the material in a way that makes more intuitive sense, and adding opportunities for services to add explanatory text and provide more context.

Organisational profile (pre-populated as much as possible)

Reporting organisation contact details (contact name, email address, phone no.)
Governance model (P-2b)
Governance (AG1 to AG6a,b)
Cultural safety (CC12)
Accreditation (AC1a to 2b)
% of organisation’s total funding from IAHP (numeric)
Description of service model (text – currently in Action Plans)

Recommend be dropped (to be checked in workshops)

P2a—service delivery purpose
P3, P4—smoke free workplace
CS4—clinical activities (MBS items, can get from Medicare)
W1—AHW by highest level of primary health care qualification
ICT1,2—clinical & management IT systems (get from the extract itself)
A4—all activities from Action Plan completed
Modules for PM&C funded-services (Link Up/SEWB/Substance use)

Service delivery site information (for each site) (pre-populate):

	Site 1	Site 2	Site 3 ……Site X
Name			
Physical location			
Days per week			
Services provided (revise responses could combine P7a & P8, additional categories)			
24 hour emergency care			

Key:

Current OSR, question or responses to be redeveloped

Brand new to OSR

Service/community context

Description of key issues related to health in the local community – can include social determinants, key health needs/priorities (text box– some of which is currently in Action Plans). Redo the current questions on SEWB, Mental Health, Substance Use tick boxes and move here? (for example, CS6a, CS7a, S15)

Client information (drawn from CIS)

Client numbers (CS3a, b, c, d)

Age sex breakdown

Number of clients with the following recorded as a current diagnosis or health issue (drawn from the Burden of Disease/nKPIs)

- Mental health problem,
- Substance use problem
- Cardiovascular
- Respiratory
- Musculoskeletal
- Type 2 Diabetes
- CKD

Number of clients with 3 or more of the above

Number of clients who have 5+ current medications prescribed

Number of clients by risk factor profiles (to be developed)

Note that the reporting of clients by disease group or risk factor would be contingent on the development of consistent disease group term sets for each clinical classification system and should not be implemented until it can be guaranteed to not add additional burden to the reporting process. Thus, these changes would require a staged approach.

Types of services provided/facilitated (pre-populate where there is no change in responses)

Types of mental health/SEWB services provided (CS6c)

Types of substance use programs or activities provided (CS7b) (query whether options should be added from S2-S4)

Types of clinical or health related services (CS8 + additional?)

Continuity of care (CS9)

Antenatal shared care arrangements (MCH4) (remove word 'effective'). If yes, describe (provide text box))

Access to specialist, allied health and dental (CS5a,b)

Clinical services provided in the past 12 months

Episodes of care (CS1a,b,c,d)

Client contacts (CS2)

MCH 1 and 2

Home visits from MCH3 (take out of group)

Health promotion and community work

Group activities and population health programs (HP1a to HP2c). Include maternal and child health (MCH3 minus home visits)

Community services (develop some from CS8 and new ones for example, transport, school-based, advocacy work, aged care etc)

Advocacy (AP1a,b)

Facilitation of screening (for example, breast cancer), participation in school-based screening, etc…

Workforce

Combine W-2 and W4 so that they sit side by side, for example, FTEs

	Employed by service			Visiting			
	Indigenous	non-Indigenous	total	Indigenous	non-Indigenous	total	TOTAL
Aboriginal Health Worker							
Doctor (GP)							
Continue list…..							

Vacant positions (W3a,b) Add text box to explain

Services have reported that this is one of the most significant sources of burden in the OSR, and that both the categories and the structure needs review. The changes below, plus an FTE calculator, clearer explanations & instructions, and aligning better with the contacts question are short-term improvements.

Year-end reflection

Success case study (text box)

Service gaps and challenges (ranking, add text boxes for description)

Knowledge and Research (AP2a,b; AP3) – add optional text box for examples

Reporting effort (redevelop into amount of effort, where the most effort was)

Approval and submission

CEO approval (A-1, A-2, A-3)

Abbreviations

ABS	Australian Bureau of Statistics
ACCHO	Aboriginal Community Controlled Health Organisation
ACCHS	Aboriginal Community Controlled Health Service
ACT	Australian Capital Territory
AHMAC	Australian Health Minister’s Advisory Council
AHCSA	Aboriginal Health Council South Australia
AHCWA	Aboriginal Health Council of Western Australia
AH&MRC	Aboriginal Health and Medical Research Council
AIHW	Australian Institute of Health and Welfare
AMSANT	Aboriginal Medical Services Alliance, Northern Territory
BMI	body mass index
BP	Best Practice
CDMP	Chronic Disease Management Plan
CKD	chronic kidney disease
CEO	Chief Executive Officer
CIS	clinical information system
COAG	Council of Australian Governments
COPD	chronic obstructive pulmonary disease
CQI	continuous quality improvement
DoH	Commonwealth Department of Health
EDW	Enterprise Data Warehouse
eGFR	estimated glomerular filtration rate
FTE	full-time equivalent
GFR	glomerular filtration rate
GP	general practitioner
GPMP	General Practitioner Management Plan
HbA1c	glycosylated haemoglobin
HDP	Health Data Portal

HPV	human papillomavirus
HS DAG	Aboriginal and Torres Strait Islander Health Services Data Advisory Group
IAHP	Indigenous Australians’ Health Programme
IF	Improvement Foundation
IP	Implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan 2013–2023
ISPHCS	Indigenous-specific primary health care services
KPI	key performance indicator
MCH	maternal and child health
METeOR	Metadata Online Registry
MBS	Medicare Benefits Schedule
MD	Medical Director
NACCHO	National Aboriginal Community Controlled Health Organisation
NATSIHSC	National Aboriginal and Torres Strait Islander Standing Committee
NGO	non-government organisation
NIAA	National Indigenous Australians Agency
nKPIs	national Key Performance Indicators collection
NSW	New South Wales
NT	Northern Territory
NTG	Northern Territory Government
OATSIH	Office for Aboriginal and Torres Strait Islander Health
OSR	Online Services Report collection
PCIS	Primary Care Information System
PHC	Primary health care
PHMO	public health medical officer
PHN	Primary Health Network
PM&C	Department of the Prime Minister and Cabinet
QAIHC	Queensland Aboriginal and Islander Health Council
Qld	Queensland
RACGP	Royal Australian College of General Practitioners
SA	South Australia

SEWB	social and emotional wellbeing
SMART principles	Specific, Measurable, Attainable, Relevant, and Time-Bound
STIs	sexually transmitted infections
TAC	Tasmanian Aboriginal Council
Tas	Tasmania
TCA	Team Care Arrangement
VACCHO	Victorian Community Controlled Health Organisation
Vic	Victoria
VR	Vocationally registered
WA	Western Australia

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The Online Services Report (OSR) and the national Key Performance Indicators (nKPIs) collect data from the organisations funded by the Australian Government to deliver comprehensive and culturally appropriate primary health care services to Aboriginal and Torres Strait Islander Australians. AIHW undertook a review of these datasets for the Department of Health. This report highlights the importance of these data collections, summarises the findings of the review and presents a series of recommendations for their improvement in the future.

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