Indigenous primary health care: results from the OSR and nKPI collections

Citation
AIHW


Information on organisations funded by the Australian Government under its Indigenous Australians’ Health Programme (IAHP) to deliver culturally appropriate primary health care services to Aboriginal and Torres Strait Islander Australians is available through two data collections—the Online Services Report (OSR); and the national Key Performance Indicators (nKPIs). This report presents the latest results from these collections.

Cat. no: IHW 227

Findings from this report:

- At June 2019, 40% of Indigenous regular clients with type 2 diabetes had blood pressure in the recommended range
- Clients of Indigenous-specific primary health care organisations had 3.7 million episodes of care in 2018-19
- Clients of Indigenous-specific primary health care organisations had 6.1 million contacts in 2018-19
- At June 2019, 38% of Indigenous regular clients aged 50 and over were immunised against influenza
Summary

Primary health care organisations play a critical role in helping to improve the health of Indigenous Australians. In 2018-19:

- Organisations provided Indigenous-specific primary health care services
- FTE staff were employed
- Clients were cared for

Most of these organisations provide data on a set of 24 process-of-care and health-outcome indicators for Indigenous Australians, focusing on maternal and child health, preventative health and chronic disease management. At June 2019, these showed that, for Indigenous regular clients:

- 38% aged 0-4 had a MBS health assessment claimed in the last year

- 50% had risk factors recorded to enable CVD assessment

- With Type 2 diabetes had a HbA1c (blood sugar) result within recommended guidelines in the last 6 months

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About this report

Primary health care organisations play a critical role in helping to improve health outcomes for Aboriginal and Torres Strait Islander Australians (hereafter referred to as Indigenous Australians). Indigenous Australians may access either mainstream or Indigenous-specific primary health care services (ISPHCS, hereafter referred to as organisations).

Information on organisations funded by the Australian Government under its Indigenous Australians’ Health Programme (IAHP) is available through two data collections, the Online Services Report (OSR) and the national Key Performance Indicators (nKPIs):

- OSR—collects information annually (financial year) on the organisations that provide Indigenous-specific primary health care services, such contextual information about each organisation, client numbers, client contacts, episodes of care, and staffing levels
- nKPIs—collects information twice a year (June and December) on a set of 24 process-of-care and health-outcome indicators for Indigenous Australians, focusing on maternal and child health, preventative health and chronic disease management.

Most organisations contribute to both collections (Table 1).

<table>
<thead>
<tr>
<th></th>
<th>June 2017&lt;sup&gt;a&lt;/sup&gt;</th>
<th>June 2018&lt;sup&gt;a&lt;/sup&gt;</th>
<th>June 2019&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting to OSR</td>
<td>196</td>
<td>198</td>
<td>210</td>
</tr>
<tr>
<td>Reporting to nKPI</td>
<td>228</td>
<td>233</td>
<td>234</td>
</tr>
<tr>
<td>Reporting to both collections</td>
<td>179</td>
<td>184</td>
<td>201</td>
</tr>
</tbody>
</table>

<sup>a</sup> Refers to the June collection period for the nKPI (covering the period January-June) and the financial year collection period for the OSR. nKPI data are also collected in December each year (covering the period July-December).

Note: Excludes data from organisations receiving funding only for maternal and child health services.

This report presents the latest results from the OSR and nKPI collections. For more information on interpreting the data and data quality, see Technical notes and Glossary. Detailed specifications and data quality statements for the collections are available on METeOR.

Purpose of the OSR and nKPI collections

The main purpose of the OSR and nKPI collections is to support continuous quality improvement (CQI) activity among organisations funded under the IAHP. They 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. In addition to this, information from the collections helps monitor progress against the Council of Australian Governments (COAG) Closing the Gap targets, and supports the national health goals set out in the Implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan 2013–2023.

Last updated 9/06/2020 v8.0
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Introduction

Comprehensive and culturally appropriate primary health care services play a key role in improving the health and wellbeing of Indigenous Australians through prevention, early intervention, health education, and the timely identification and management of physical and psychological issues (Griew et al. 2008).

To this end, the Australian Government provides funding through the IAHP to organisations delivering Indigenous-specific primary health care services (referred to hereafter as organisations). These organisations, designed to be accessible to Aboriginal and Torres Strait Islander clients, are administered and run by:

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

They 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 (for example, 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, which often involves addressing a complex mix of health conditions.

Each organisation provides contextual information about their organisation to the OSR once each financial year (covering the period July–June). The OSR includes all activities of the funded organisations, regardless of the percentage of those activities funded by IAHP.

This chapter presents a profile of organisations delivering Indigenous-specific primary health care services, including staffing levels, client numbers, client contacts, episodes of care and services provided. It excludes data from organisations that received funding only for maternal and child health services.

Trends over time are presented where possible, noting that the organisations providing data can vary over time which may limit comparability for some purposes (see Technical notes and Glossary for more information). Also, in 2018–19, the OSR collection underwent significant change and was scaled back to include only ‘core’ items. Plans are underway to reintroduce key items in a staged approach over the next few years.

The following boxes show key results for organisations providing Indigenous-specific primary health care in 2018–19. Clicking on a box will go to more information on the selected topic.

Organisations

- organisations provided Indigenous-specific primary health care

Client numbers

- 498,000 clients were cared for

FTE staff

- FTE staff were employed

FTE vacancies

- vacant FTE positions

Client contacts

- average contacts per client

Episodes of care

- average episodes of care per client

References


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Summary over time

Table 1 presents results over time for Indigenous-specific primary health care organisations included in the OSR.

Table 1: Summary of Indigenous-specific primary health care organisations, 2013–14 to 2018–19 (number)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisations</td>
<td>203</td>
<td>203</td>
<td>204</td>
<td>196</td>
<td>198</td>
<td>210</td>
</tr>
<tr>
<td>Clients</td>
<td>418,910</td>
<td>434,610</td>
<td>461,483</td>
<td>444,721</td>
<td>483,073</td>
<td>498,206</td>
</tr>
<tr>
<td>Indigenous clients</td>
<td>323,566</td>
<td>344,331</td>
<td>364,389</td>
<td>364,087</td>
<td>391,860</td>
<td>393,101</td>
</tr>
<tr>
<td>FTE staff</td>
<td>7,401</td>
<td>7,664</td>
<td>8,083</td>
<td>7,869</td>
<td>8,215</td>
<td>8,343</td>
</tr>
<tr>
<td>Health FTE staff</td>
<td>4,526</td>
<td>4,728</td>
<td>4,738</td>
<td>4,673</td>
<td>4,938</td>
<td>4,824</td>
</tr>
<tr>
<td>Employed FTE staff</td>
<td>7,108</td>
<td>7,359</td>
<td>7,766</td>
<td>7,600</td>
<td>7,945</td>
<td>7,981</td>
</tr>
<tr>
<td>Employed Health FTE staff</td>
<td>4,266</td>
<td>4,454</td>
<td>4,457</td>
<td>4,439</td>
<td>4,695</td>
<td>4,495</td>
</tr>
<tr>
<td>Employed Indigenous FTE staff</td>
<td>3,798</td>
<td>3,873</td>
<td>4,118</td>
<td>4,004</td>
<td>4,254</td>
<td>4,130</td>
</tr>
<tr>
<td>Health FTE per 1,000 clients</td>
<td>10.8</td>
<td>10.9</td>
<td>10.3</td>
<td>10.5</td>
<td>10.2</td>
<td>9.7</td>
</tr>
<tr>
<td>Average contacts per client</td>
<td>11.0</td>
<td>11.6</td>
<td>11.7</td>
<td>12.4</td>
<td>12.6</td>
<td>12.2</td>
</tr>
<tr>
<td>Average episodes of care per client</td>
<td>7.8</td>
<td>8.2</td>
<td>8.4</td>
<td>7.2 (a)</td>
<td>7.5</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Notes

1. Episodes of care data for 2016–17 are not comparable with other years because changes were made to the types of contacts that were counted as an episode of care and to how episodes of care were defined and recorded within some clinical information systems. These led to lower numbers of episodes of care recorded and potential undercounts for some services in 2016–17.

Source: AIHW OSR collection.
Organisations

In 2018–19, 210 primary health care organisations reported to the OSR.

Indigenous-specific primary health care organisations, by reporting period (number)

This Tableau visualisation shows the number of organisations for reporting periods 2013–14 to 2018–19.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Of these:
- one-third (33%) were in the Northern Territory
- around two-thirds (65%) were Aboriginal Community Controlled Health Services (ACCHS), 30% were government-run organisations (many of these were Northern Territory Government-run clinics) and 4% were other non-government-run organisations
- just over one-third (36%) were in Very remote areas, 14% in Remote areas, 20% in Outer regional areas, 20% in Inner regional areas and 10% in Major cities.

Indigenous-specific primary health care organisations, by organisation type, 2018–19 (number and %)

This Tableau visualisation shows the number and percentage of organisations by the type of organisation (ACCHS, government, other) for reporting period 2018–19.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

The size, in terms of number of clients, of organisations providing Indigenous-specific primary health care varies by jurisdiction, remoteness and organisation type.

Indigenous-specific primary health care organisations, by client number (size) and state/territory or organisation type or remoteness, reporting period (number)

This Tableau visualisation shows the number of organisations by the number of clients (<500, 500–1,499, 1,500–2,999, >3,000) for either:
- type of organisation (ACCHS, government, other)
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods between 2013–14 to 2018–19 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.
Workforce

The OSR collects 2 measures of the workforce of organisations—full-time equivalent (FTE) staff and FTE vacancies.

The following boxes show key results for 2018–19. Clicking on a box will go to more information on the selected topic.

**FTE staff**

<table>
<thead>
<tr>
<th>Indigenous staff</th>
<th>Health staff</th>
<th>Remoteness</th>
</tr>
</thead>
<tbody>
<tr>
<td>52%</td>
<td>56%</td>
<td>of employed FTE were in Very remote areas</td>
</tr>
</tbody>
</table>

- of employed FTE staff were Indigenous
- of employed FTE staff were health staff
- of vacant FTE positions were for Aboriginal and Torres Strait Islander health workers and practitioners
- of FTE vacancies were for health staff
- of vacancies were in Very Remote areas

Last updated 29/05/2020 v8.0

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**Workforce**

**Staffing (FTE)**

At 30 June 2019, organisations employed just under 8,000 FTE staff. They also had around 360 visiting FTE staff not paid for by the organisations themselves.

**Employed FTE staff, by Indigenous status and state/territory or organisation type or remoteness, reporting period (number and %)**

This Tableau visualisation shows the number and percentage of employed FTE staff by Indigenous status (Indigenous, non-Indigenous) for either:

- type of organisation (ACCHS, government, other)
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods between 2013–14 to 2018–19 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at [Data](#).

Health staff represented over half (56%) of employed FTE staff (around 4,500 FTE). Nurses and midwives were the most common type of health workers (15% of all employed FTE staff), followed by Aboriginal and Torres Strait Islander health workers and practitioners (12%) and GPs (7%).

Around half of employed FTE staff were Indigenous (52%, or 4,100 FTE). Nearly half (47%) of health staff, and 58% of other staff, were Indigenous.

**Employed FTE staff, by position type and state/territory or organisation type or remoteness, reporting period (number in label and % on axis)**

This Tableau visualisation shows the number and percentage of employed FTE staff by position type for either:

- type of organisation (ACCHS, government, other)
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods between 2013–14 to 2018–19 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at [Data](#).

Close to half (43%) of employed FTE staff were in either **Very remote** (23%) or **Remote** (19%) areas.
Workforce

Vacancies (FTE)

At 30 June 2019, organisations had over 390 vacant FTE positions. Of these:

- 77% of these were for health positions
- 36% were in Very Remote areas, 23% in Remote areas, 20% in Outer regional areas, 13% in Major cities, and 8% in Inner regional areas.

Vacant FTE positions, by vacancy type and state/territory or organisation type or remoteness, reporting period (number and %)

This Tableau visualisation shows the number and percentage of vacant FTE positions by vacancy type (health, other) for either:

- type of organisation (ACCHS, government, other)
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods between 2013–14 to 2018–19 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Over half (51%) of health vacancies were for either:

- Aboriginal and Torres Strait Islander health workers and practitioners (26%)
- nurses and midwives (25%).

Vacant FTE positions, by vacancy type and state/territory or organisation type or remoteness, reporting period (number in label and % on axis)

This Tableau visualisation shows the number and percentage of vacant FTE positions by vacancy type (expanded list) for either:

- type of organisation (ACCHS, government, other)
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods between 2013–14 to 2018–19 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

There were 0.8 vacant FTE positions per 1,000 clients. This was highest in Very remote and Remote areas—1.4 and 1.1 per 1,000 clients, respectively, compared with 0.3 in Inner regional areas, 0.5 in Major cities and 0.6 in Outer regional areas.

Vacant FTE positions per 1,000 clients, by vacancy type and state/territory or organisation type or remoteness, reporting period

This Tableau visualisation shows the number of vacant FTE positions per 1,000 clients by vacancy type (health, other) for either:

- type of organisation (ACCHS, government, other)
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods between 2013–14 to 2018–19 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.
Clients

The OSR collects 3 measures related to the clients that organisations see—client numbers, client contacts and episodes of care.

Client numbers

Client numbers refers to how many individuals receive health care by an organisation during the collection period. Each individual is counted as a client once only, regardless of how many times they are seen. Visitors and transient clients are included in client counts, but clients attending group activities only (and who do not receive individual care) are excluded. See also Regular client in Technical notes.

Client contacts

Client contacts are a count of the contacts made by each type of health worker in an organisation (both employed and visiting health staff), and include those made by drivers and field officers (transport contacts). Client contacts do not include administrative contacts or those relating to groups and residential care. See also Episodes of care and Technical notes.

Episodes of care

An episode of care is a contact between a client and 1 or more health workers in an organisation in 1 calendar day. All contacts with the same client on the same day are counted as 1 episode of care only, but if more than 1 health worker sees that client in the same day (for example, both a nurse and doctor see the same client) then 1 episode of care will count as multiple client contacts. An episode of care may be provided by employed or visiting health staff, either on site or off site, and includes outreach, hospital contact with clients, telephone contacts of a clinical nature, care delivered over the phone which results in an update to a client’s record and other clinical consultations. Episodes of care do not include administrative contacts or those relating to groups and residential care.

Episodes of care data for 2016–17 are not comparable with other years. In that year, changes were made to the types of contacts that were counted as an episode of care, with hospital-related contacts and telephone contacts excluded. There were also changes within some clinical information systems in how episodes of care were defined and recorded. These led to lower numbers of episodes of care recorded and potential undercounts for some services in 2016–17. See also Client contacts and Technical notes.

The following boxes show key results for 2018-19. Clicking on a box will go to more information on the selected topic.

<table>
<thead>
<tr>
<th>Client numbers</th>
<th>Organisation type</th>
<th>Indigenous clients</th>
<th>Remoteness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80%</td>
<td>of clients were Indigenous</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>of clients were seen by Aboriginal Community Controlled Health Services</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Client contacts</th>
<th>Organisation type</th>
<th>Indigenous clients</th>
<th>Remoteness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.2 Million</td>
<td>of Indigenous client contacts were with a nurse/midwife</td>
<td>1.5 Million</td>
</tr>
<tr>
<td></td>
<td>client contacts at Aboriginal Community Controlled Health Services</td>
<td>client contacts in Outer regional areas</td>
<td></td>
</tr>
<tr>
<td>Episodes of care</td>
<td>Organisation type</td>
<td>Indigenous clients</td>
<td>Remoteness</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------</td>
<td>--------------------</td>
<td>------------</td>
</tr>
<tr>
<td></td>
<td>episodes of care by Aboriginal Community Controlled Health Services</td>
<td>85% of episodes of care were with Indigenous clients</td>
<td>23% of episodes of care provided in Very remote areas</td>
</tr>
</tbody>
</table>
Clients

Client numbers

In 2018–19, organisations saw around 498,000 clients.

Client numbers by sex and reporting period (number)

This Tableau visualisation shows the number of clients by sex for reporting periods 2013–14 to 2018–19.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Of these:

- 46% were male
- 79% were Indigenous
- 25% were seen in Outer regional areas, 20% in both Major Cities and Very remote areas, 19% in Inner Regional areas, and 17% in Remote areas
- 30% were seen in Queensland, 22% in New South Wales/the Australian Capital Territory (combined), and 21% in the Northern Territory
- 80% were seen by Aboriginal Community Controlled Health Services (ACCHS).

Client numbers, by sex and state/territory or organisation type or remoteness, reporting period (number and %)

This Tableau visualisation shows the number and percentage of clients by sex (male, female) for either:

- type of organisation (ACCHS, government, other)
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods between 2013–14 to 2018–19 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Indigenous OSR clients and estimated Indigenous population, by state/territory, reporting period

This Tableau visualisation shows the number of Indigenous clients compared with the estimated Indigenous population (ERP). Reporting periods between 2013–14 to 2018–19 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

References

Clients

Client contacts

In 2018–19, organisations had around 6.1 million client contacts.

Client contacts, by contact type and reporting period (number)

This Tableau visualisation shows the number of client contacts by contact type (general practitioner, nurse/midwife, AHP/APH, SEWB staff, allied health/medical specialists, transport, other health) for reporting periods 2013–14 to 2018–19.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

Of these:

- 86% were with Indigenous clients
- 25% were provided in Outer regional areas
- 30% were provided in Queensland, 21% in New South Wales/the Australian Capital Territory (combined), and 21% in the Northern Territory
- 85% were provided by Aboriginal Community Controlled Health Services (ACCHS)
- 31% were made by nurses and midwives
- 29% were made by a general practitioner (GP)
- 16% were made by Aboriginal and Torres Strait Islander health workers and practitioners
- 7% were transport contacts by drivers and field officers.

Client contacts, by contact type and state/territory or organisation type or remoteness, reporting period (number and %)

This Tableau visualisation shows the number and percentage of client contacts by contact type (general practitioner, nurse/midwife, AHP/APH, SEWB staff, allied health/medical specialists, transport, other health) for either:

- type of organisation (ACCHS, government, other)
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods between 2013–14 to 2018–19 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

There was an average of 12.2 contacts per client. This has generally increased over time.

Average number of client contacts per client, by contact type and state/territory or organisation type or remoteness, reporting period

This Tableau visualisation shows the average number of client contacts per client by contact type (general practitioner, nurse/midwife, AHP/APH, SEWB staff, allied health/medical specialists, transport, other health) for either:

- type of organisation (ACCHS, government, other)
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods between 2013–14 to 2018–19 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

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Clients

Episodes of care

In 2018–19, organisations had around 3.7 million episodes of care.

**Episodes of care by sex and reporting period (number)**

This Tableau visualisation shows the number of episodes of care by sex (male, female) for reporting periods 2013–14 to 2018–19.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Of these:

- 85% were with Indigenous clients
- 58% were with female clients
- 23% were provided in **Very remote areas**
- 29% were provided in Queensland, 23% in the Northern Territory and 20% in New South Wales/the Australian Capital Territory (combined)
- 81% were provided by Aboriginal Community Controlled Health Services (ACCHS).

**Episodes of care, by sex and state/territory or organisation type or remoteness, reporting period (number and %)**

This Tableau visualisation shows the number and percentage of episodes of care by sex (male, female) for either:

- type of organisation (ACCHS, government, other)
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods between 2013–14 to 2018–19 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

There was an average of 7.5 episodes of care per client. This has generally decreased over time.

**Average number of episodes of care per client, by sex and state/territory or organisation type or remoteness, reporting period**

This Tableau visualisation shows the average number of episodes of care per client by sex (male, female) for either:

- type of organisation (ACCHS, government, other)
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods between 2013–14 to 2018–19 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.
Services provided

An organisation may deliver services from one or more sites. In 2017–18, Indigenous-specific primary health care was delivered by 198 organisations from 383 service delivery sites (Table 1). Data on service delivery sites and services provided were not collected in 2018–19. Work is underway to revise and reintroduce these items for future collections.

Most sites provided clinical services such as the diagnosis and treatment of chronic illnesses (88%), mental health and counselling services (88%), maternal and child health care (86%), and antenatal care (78%). Around two-thirds provided tobacco programs (69%) and substance-use and drug and alcohol programs (66%).

Most organisations provided access to a doctor (86%) and just over half (54%) delivered a wide range of services, including all of the following during usual opening hours: the diagnosis and treatment of illness and disease; antenatal care; maternal and child health care; social and emotional wellbeing/counselling services; substance use programs; and on-site or off-site access to specialist, allied health and dental care services.

Most organisations (95%) also provided group activities as part of their health promotion and prevention work. For example, in 2017–18, these organisations provided around:
- 8,400 physical activity/healthy weight sessions
- 3,700 living skills sessions
- 4,600 chronic disease client support sessions
- 4,100 tobacco-use treatment and prevention sessions.

In addition to the services they provide, organisations reported on service gaps and challenges they faced and could list up to 5 of each from predefined lists. These were not ranked in terms of priority. In 2017–18, around two-thirds of organisations (68%) reported mental health/social and emotional health and wellbeing services as a gap faced by the community they served. This was followed by youth services (54%). Over two-thirds of organisations (71%) reported the recruitment, training and support of Aboriginal and Torres Strait Islander staff as a challenge in delivering quality health services.

Table 1: Service delivery sites, type of service, 2017–18

<table>
<thead>
<tr>
<th>Type of service</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social and emotional wellbeing/mental health/counselling</td>
<td>337</td>
<td>88.0</td>
</tr>
<tr>
<td>Diagnosis/treatment of chronic illness/disease</td>
<td>336</td>
<td>87.7</td>
</tr>
<tr>
<td>Transport</td>
<td>331</td>
<td>86.4</td>
</tr>
<tr>
<td>Maternal/child health care</td>
<td>328</td>
<td>85.6</td>
</tr>
<tr>
<td>Treatment of injury</td>
<td>317</td>
<td>82.8</td>
</tr>
<tr>
<td>Diagnosis/treatment of infectious illness/disease</td>
<td>316</td>
<td>82.5</td>
</tr>
<tr>
<td>Antenatal care</td>
<td>298</td>
<td>77.8</td>
</tr>
<tr>
<td>Tobacco programs</td>
<td>265</td>
<td>69.2</td>
</tr>
<tr>
<td>Substance use/drug and alcohol programs</td>
<td>252</td>
<td>65.8</td>
</tr>
<tr>
<td>Total sites</td>
<td>383</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Clinical services provided, by either state/territory or organisation type or remoteness, by reporting period (number in label and % on axis)

This Tableau visualisation shows the number and percentage of vacant FTE positions by vacancy type (expanded list) for either:
- type of organisation (ACCHS, government, other)
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods between 2013–14 to 2017–18 can be selected. The option to explore further by the topic of interest (health promotion activities; group activities; access to specialist, allied health and dental services; service gaps; service challenges) is provided.
Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

Last updated 4/06/2020 v7.0
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Introduction

The nKPIs are a set of 24 indicators provided by organisations receiving IAHP funding to deliver comprehensive and culturally appropriate primary health care services to Indigenous Australians.

The nKPIs are collected for Indigenous regular clients of each organisation twice a year in:

- July—covering the period 1 January–30 June
- January—covering the period 1 July–31 December.

Indigenous regular clients

Organisations collecting nKPIs may see a mix of Indigenous and non-Indigenous clients. Some of these are considered regular clients of the organisation. Only data for Indigenous regular clients are provided to the nKPIs.

For the purposes of the nKPIs, an Indigenous regular client is defined as an Aboriginal or Torres Strait Islander Australian who has an active medical record—that is, who attended a particular primary health care organisation at least 3 times in the previous 2 years. This definition is consistent with the RAGCP definition of an active patient (RACGP 2020). See Technical notes and Glossary for more information.

The nKPIs cover 15 process-of-care and 9 health-outcome indicators organised under three domains (see Technical notes for a list of indicators by domain and type). While the process-of-care indicators are largely (but not completely) under the control of organisations and indicate good practice in primary health care, health outcomes are influenced by a range of factors known as social determinants (such as education, employment, housing, access to resources, racism) some of which are beyond the immediate control of organisations.

As such, the nKPIs needs to be viewed in context of the broader environment in which organisations operate and in which the data are collected. In particular, it is important to acknowledge that the nKPIs capture only a subset of the important work that organisations do each day. Data from this collection can make an important contribution when used by health service providers at the local level to identify opportunities and to measure progress towards achieving change, or when used by policy makers to inform policy decisions.

This chapter presents results for each nKPI, providing an indication of areas where further investigation and improvements might be needed. Where possible, trends over time are presented. However, the number of organisations included varies over time and by indicator for each period depending on the quality of the data submitted. This may limit comparability over time for some purposes (see Technical notes for more information).

The following tables show key trends over time for each indicator. Click on the link to get more information on the associated indicator.

Key: ✔ = improved; ✘ = not improved; ► = no change

### Maternal and child health indicators

<table>
<thead>
<tr>
<th>✔ First antenatal visit before 13 weeks</th>
<th>✔ Birthweight recorded</th>
<th>► Low birthweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read more on PI13</td>
<td>Read more on PI01</td>
<td>Read more on PI02</td>
</tr>
<tr>
<td>✔ Smoking during pregnancy (current smoker)</td>
<td>✔ Child immunisation</td>
<td>✔ MBS health assessment (item 715)—aged 0-4</td>
</tr>
<tr>
<td>Read more on PI11</td>
<td>Read more on PI04</td>
<td>Read more on PI03</td>
</tr>
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</table>

### Preventative health indicators

<table>
<thead>
<tr>
<th>✔ Smoking status recorded</th>
<th>✘ Current smoker</th>
<th>✔ Alcohol consumption status recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read more on PI09</td>
<td>Read more on PI10</td>
<td>Read more on PI16</td>
</tr>
<tr>
<td>✘ AUDIT-C result of high-risk</td>
<td>✔ MBS health assessment (item 715)—aged 25 and over</td>
<td>✔ Risk factors to enable CVD assessment</td>
</tr>
<tr>
<td>Read more on PI17</td>
<td>Read more on PI03</td>
<td>Read more on PI20</td>
</tr>
<tr>
<td>✔️</td>
<td>High absolute cardiovascular risk</td>
<td>✘</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Read more on PI21</td>
<td></td>
</tr>
<tr>
<td>✘</td>
<td>BMI classified as overweight or obese</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Read more on PI12</td>
<td></td>
</tr>
</tbody>
</table>

### Chronic disease management indicators

<table>
<thead>
<tr>
<th>✔️</th>
<th>General Practitioner Management Plan—type 2 diabetes</th>
<th>✔️</th>
<th>Team Care Arrangement—type 2 diabetes</th>
<th>✔️</th>
<th>Blood pressure result recorded—type 2 diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Read more on PI07</td>
<td></td>
<td>Read more on PI08</td>
<td></td>
<td>Read more on PI23</td>
</tr>
<tr>
<td>✘</td>
<td>Blood pressure result of ≤130/80mmHg—type 2 diabetes</td>
<td>✔️</td>
<td>HbA1c result recorded (previous 6 months)—type 2 diabetes</td>
<td>✔️</td>
<td>HbA1c result of ≤53 mmol/mol—type 2 diabetes</td>
</tr>
<tr>
<td></td>
<td>Read more on PI24</td>
<td></td>
<td>Read more on PI05</td>
<td></td>
<td>Read more on PI06</td>
</tr>
<tr>
<td>✔️</td>
<td>Kidney function test recorded—type 2 diabetes</td>
<td>✘</td>
<td>Kidney test, eGFR result of ≥60 mL/min/1.73m²—type 2 diabetes</td>
<td>✔️</td>
<td>Kidney test, ACR result of &lt;2.5 (Males) or &lt;3.5 (Females)—type 2 diabetes</td>
</tr>
<tr>
<td></td>
<td>Read more on PI18</td>
<td></td>
<td>Read more on PI19-A</td>
<td></td>
<td>Read more on PI19-B</td>
</tr>
<tr>
<td>✔️</td>
<td>Kidney function test recorded—CVD</td>
<td>✔️</td>
<td>Kidney test, eGFR result of ≥60 mL/min/1.73m²—CVD</td>
<td>✔️</td>
<td>Immunised against influenza—type 2 diabetes</td>
</tr>
<tr>
<td></td>
<td>Read more on PI18</td>
<td></td>
<td>Read more on PI19-A</td>
<td></td>
<td>Read more on PI15</td>
</tr>
<tr>
<td>✔️</td>
<td>Immunised against influenza—COPD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Read more on PI15</td>
<td></td>
<td></td>
<td></td>
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</table>

### References

Last updated 9/06/2020 v68.0
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Table 1 presents nKPI results and trends between the June 2017 and June 2019 reporting periods.

### Maternal and child health indicators

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PI13: First antenatal visit before 13 weeks</td>
<td>39.2</td>
<td>41.2</td>
<td>42.4</td>
<td>42.0</td>
<td>40.6</td>
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<tr>
<td>PI01: Birthweight recorded</td>
<td>69.5</td>
<td>72.8</td>
<td>73.7</td>
<td>73.2</td>
<td>71.1</td>
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<tr>
<td>PI02: Low birthweight</td>
<td>11.4</td>
<td>12.4</td>
<td>13.2</td>
<td>12.1</td>
<td>11.6</td>
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<td>PI11: Smoking during pregnancy (current smoker)</td>
<td>48.9</td>
<td>50.0</td>
<td>49.2</td>
<td>48.0</td>
<td>48.2</td>
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<td>PI04: Child immunisation((c))</td>
<td>69.1</td>
<td>69.1</td>
<td>73.4</td>
<td>69.5</td>
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<tr>
<td>PI03: MBS health assessment (item 715)—clients aged 0-4</td>
<td>35.0</td>
<td>35.0</td>
<td>37.1</td>
<td>36.7</td>
<td>38.4</td>
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</table>

### Preventative health indicators

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>PI09: Smoking status recorded</td>
<td>80.3</td>
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<td>82.2</td>
<td>82.0</td>
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<td>✓</td>
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<tr>
<td>PI10: Current smoker</td>
<td>51.7</td>
<td>52.1</td>
<td>52.1</td>
<td>51.9</td>
<td>52.2</td>
<td>×</td>
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<tr>
<td>PI16: Alcohol consumption status recorded</td>
<td>59.4</td>
<td>60.6</td>
<td>61.7</td>
<td>60.7</td>
<td>62.0</td>
<td>✓</td>
</tr>
<tr>
<td>PI17: AUDIT-C result of high-risk</td>
<td>49.0</td>
<td>48.3</td>
<td>47.9</td>
<td>48.9</td>
<td>48.9</td>
<td>×</td>
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<tr>
<td>PI03: MBS health assessment (item 715)—aged 25 and over</td>
<td>50.1</td>
<td>50.6</td>
<td>51.7</td>
<td>52.2</td>
<td>53.6</td>
<td>✓</td>
</tr>
<tr>
<td>PI20: Risk factors to enable CVD assessment</td>
<td>46.1</td>
<td>47.0</td>
<td>48.7</td>
<td>49.9</td>
<td>50.3</td>
<td>✓</td>
</tr>
<tr>
<td>PI21: High absolute cardiovascular risk</td>
<td>35.6</td>
<td>35.8</td>
<td>34.7</td>
<td>34.9</td>
<td>35.1</td>
<td>✓</td>
</tr>
<tr>
<td>PI22: Cervical screening in previous 5 years ((c))</td>
<td>43.9</td>
<td>43.8</td>
<td>46.7</td>
<td>42.7</td>
<td>42.5</td>
<td>×</td>
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<tr>
<td>PI14: Immunised against influenza—aged 50 and over</td>
<td>31.9</td>
<td>35.6</td>
<td>34.1</td>
<td>36.5</td>
<td>37.7</td>
<td>✓</td>
</tr>
<tr>
<td>PI12: BMI classified as overweight or obese</td>
<td>71.0</td>
<td>70.7</td>
<td>70.8</td>
<td>71.2</td>
<td>71.2</td>
<td>×</td>
</tr>
</tbody>
</table>

### Chronic disease management indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PI07: General Practitioner Management Plan—type 2 diabetes</td>
<td>53.6</td>
<td>54.7</td>
<td>56.2</td>
<td>56.4</td>
<td>56.1</td>
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<tr>
<td>PI08: Team Care Arrangement—type 2 diabetes</td>
<td>51.1</td>
<td>52.6</td>
<td>54.0</td>
<td>54.0</td>
<td>53.4</td>
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<td>Indicator</td>
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<td>Value 2</td>
<td>Value 3</td>
<td>Value 4</td>
<td>Value 5</td>
<td>Status</td>
</tr>
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<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>PI23: Blood pressure result recorded—type 2 diabetes</td>
<td>64.0</td>
<td>64.1</td>
<td>66.2</td>
<td>65.0</td>
<td>66.8</td>
<td>✔</td>
</tr>
<tr>
<td>PI24: Blood pressure result of ≤130/80mmHg—type 2 diabetes</td>
<td>41.0</td>
<td>42.7</td>
<td>41.3</td>
<td>42.9</td>
<td>40.3</td>
<td>❌</td>
</tr>
<tr>
<td>PI05: HbA1c result recorded (previous 6 months)—type 2 diabetes</td>
<td>48.9</td>
<td>48.4</td>
<td>52.0</td>
<td>49.0</td>
<td>52.2</td>
<td>✔</td>
</tr>
<tr>
<td>PI06: HbA1c result of ≤53 mmol/mol—type 2 diabetes</td>
<td>38.3</td>
<td>36.5</td>
<td>38.9</td>
<td>37.9</td>
<td>38.6</td>
<td>✔</td>
</tr>
<tr>
<td>PI18: Kidney function test recorded—type 2 diabetes</td>
<td>n.a.</td>
<td>62.6</td>
<td>62.0</td>
<td>63.0</td>
<td>64.0</td>
<td>✔</td>
</tr>
<tr>
<td>PI19-A: Kidney test, eGFR result of ≥60 mL/min/1.73 m²—type 2 diabetes</td>
<td>n.a.</td>
<td>81.3</td>
<td>81.9</td>
<td>81.1</td>
<td>81.3</td>
<td>❌</td>
</tr>
<tr>
<td>PI19-B: Kidney test, ACR result of &lt;2.5 (Males) or &lt;3.5 (Females)—type 2 diabetes</td>
<td>n.a.</td>
<td>39.3</td>
<td>41.2</td>
<td>41.7</td>
<td>43.7</td>
<td>✔</td>
</tr>
<tr>
<td>PI18: Kidney function test recorded—CVD</td>
<td>n.a.</td>
<td>57.9</td>
<td>58.9</td>
<td>60.9</td>
<td>62.0</td>
<td>✔</td>
</tr>
<tr>
<td>PI19-A: Kidney test, eGFR result of ≥60 mL/min/1.73 m²—CVD</td>
<td>n.a.</td>
<td>76.2</td>
<td>76.2</td>
<td>76.6</td>
<td>77.3</td>
<td>✔</td>
</tr>
<tr>
<td>PI15: Immunised against influenza—type 2 diabetes</td>
<td>30.6</td>
<td>36.1</td>
<td>33.8</td>
<td>36.2</td>
<td>36.0</td>
<td>✔</td>
</tr>
<tr>
<td>PI15: Immunised against influenza—COPD</td>
<td>31.9</td>
<td>37.1</td>
<td>37.2</td>
<td>40.4</td>
<td>38.1</td>
<td>✔</td>
</tr>
</tbody>
</table>

a. Proportions in this table are rounded to 1 decimal place.
b. Trend is calculated as a linear trend between the June 2017 and June 2019 reporting periods, including the December reporting periods.
c. This is affected by a change in cervical screening guidelines and the way it was collected in the nKPIs (see Technical notes for more information)

Notes

1. Key: ✔ = improved; ❌ = not improved; ► = no change
2. The indicator ‘PI04: Child immunisation’ is excluded due to concerns over data validity.
3. See Technical notes for more information.

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Organisations and clients

The number of organisations providing nKPI data each reporting period varies—in the June 2017 reporting period there were 228 organisations, increasing to 233 at June 2018, and again to 234 at June 2019.

Reporting organisations, by state/territory and remoteness, reporting period

This Tableau visualisation shows the number of organisations reporting to the nKPIs by:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

The number of Indigenous regular clients organisations see has increased over time—from 218,945 at June 2017, to 238,845 at June 2018, and 243,108 at June 2019.

References

Maternal and child health indicators

Maternal and child health indicators in the nKPIs consist of 4 process-of-care and 2 health-outcome indicators.

The following boxes show key results for Indigenous regular clients. Click on a box to get more information on the associated indicator.

**First antenatal visit**
- who gave birth in the last year had their first antenatal visit before 13 weeks
  
  Process-of-care indicator

**Birthweight recorded**
- born in the last year had their birthweight recorded
  
  Process-of-care indicator

**Birthweight result**
- born in the last year had a normal birthweight
  
  Health-outcome indicator

**Smoking during pregnancy**
- who gave birth in the last year were a current smoker in that time
  
  Health-outcome indicator

**Child immunisation**
- aged 12-72 months were fully immunised
  
  Process-of-care indicator

**MBS health assessment**
- aged 0-4 had a MBS health assessment claimed in the last year
  
  Process-of-care indicator

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Maternal and child health indicators

First antenatal visit (PI13)

This indicator is the proportion of female Indigenous regular clients who gave birth within the previous 12 months who had their first antenatal care visit within the following periods:

- before 13 weeks
- 13–19 weeks
- 20 or more weeks
- not recorded or no visit.

It is collected for age groups:

- less than 20
- 20–34
- 35 and over.

Why is antenatal care important?

Antenatal care is a planned visit between a pregnant woman and a midwife or doctor to assess and improve the wellbeing of the mother and baby throughout pregnancy. It does not include visits where the sole purpose is to confirm the pregnancy.

Antenatal care provides an opportunity to find, treat, and provide advice on chronic or pre-existing conditions that might cause pregnancy-related complications, such as hypertension, diabetes, mental health problems, sexually transmitted infections, tobacco and alcohol misuse, inadequate nutrition, and unhealthy weight.

Regular antenatal care, and especially that starting in the first trimester, is associated with less pregnancy-related complications and with positive maternal and child health outcomes (AIHW 2019a). Indigenous mothers are less likely than non-Indigenous mothers to have their first antenatal care visit in the first trimester (AIHW 2019b).

At June 2019, 41% of female Indigenous regular clients who gave birth in the previous 12 months had their first antenatal care visit in the first trimester (before 13 weeks gestational age). The first trimester in the nKPIs is different to that collected in the National Perinatal Data Collection (NPDC), which considers the first trimester as before 14 week gestational age.

Timing of first antenatal visit, by reporting period

This Tableau visualisation shows the percentage of female Indigenous regular clients who gave birth in the last year by the timing of their first antenatal visit (gestational age not recorded, no visit recorded, before 13 weeks, 13–19 weeks, or 20 or more weeks) and reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Having the first antenatal visit in the first trimester was highest in

- South Australia (52%)
- Inner regional areas (49%).

It was lowest in:

- Queensland (29%)
- Major cities (29%).

However, this is affected by the completeness of the recording of antenatal visits in each jurisdiction (see Technical notes for more information).

Timing of first antenatal visit, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of female Indigenous regular clients who gave birth in the last year by the timing of their first antenatal visit (select for gestational age not recorded, no visit recorded, before 13 weeks, 13-19 weeks, or 20 or more weeks) for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).
Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected. The second visualisation shows the selected information from the first visualisation by age group (<20, 20–34, 35+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

References


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Maternal and child health indicators

Birthweight (PI01 and PI02)
Indicators related to birthweight in the nKPI are:

- the proportion of Indigenous babies born within the previous 12 months whose birthweight was recorded at the primary health care organisation
- the proportion of Indigenous babies born within the previous 12 months whose birthweight results were low, normal or high.

Why is birthweight important?
Birthweight is a key indicator of a baby’s immediate health and a determinant of their future health. Measuring birthweight allows infants to be given early and suitable intervention, which can mitigate adverse outcomes. Indigenous mothers are less likely to have a baby of normal birthweight than non-Indigenous mothers (AIHW 2019b).

Low birthweight babies (less than 2,500 grams) are more likely to die in infancy or to be at increased risk of illness in infancy. Low birthweight is closely associated with pre-term birth—almost 3 in 4 low birthweight babies were pre-term, and more than half of pre-term babies were of low birthweight in 2017 (AIHW 2019a). Babies may also be low birthweight because they are small for gestational age, while some low-birthweight babies may be both pre-term and small for gestational age.

High birthweight (4,500 grams or more) is also of concern. Data from 12 high, middle and low-income countries indicates that higher birthweight was associated with increased odds of obesity among children aged 9-11 (Qiao et al. 2015).

Birthweight recorded (PI01)
This indicator is the proportion of Indigenous babies born within the previous 12 months whose birthweight has been recorded at the primary health care organisation.

At June 2019, 71% of Indigenous babies born in the previous 12 months had their birthweight recorded.

Birthweight recorded, by reporting period
This Tableau visualisation shows the percentage of Indigenous babies born in the last year whose birthweight was recorded at the primary health care organisation by reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Recording of birthweight was highest in:
- South Australia (81%)
- Major cities (82%).

It was lowest in:
- the Northern Territory (54%)
- Very remote areas (55%).

Birthweight recorded, by either state/territory or remoteness, reporting period
This Tableau visualisation shows the percentage of Indigenous babies born in the last year whose birthweight was recorded at the primary health care organisation for either:
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Birthweight result (PI02)
This indicator is the proportion of Indigenous babies born within the previous 12 months whose birthweight result recorded at the primary health care organisation were low, normal or high.

At June 2019, 86% of Indigenous babies born in the previous year had a normal birthweight.

**Birthweight result, by reporting period**

This Tableau visualisation shows the percentage of Indigenous babies born in the last year whose birthweight was recorded at the primary health care organisation by birthweight result (low, normal, high) and reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

**Visualisation not available for printing**

Having a normal birthweight was highest in:
- Queensland and South Australia (both 89%)
- **Major cities and Inner regional** areas (both 88%).

It was lowest in:
- Victoria/Tasmania (82% combined)
- **Remote** areas (82%).

**Birthweight result, by either state/territory or remoteness, reporting period**

This Tableau visualisation shows the percentage of Indigenous babies born in the last year whose birthweight was recorded at the primary health care organisation by birthweight result (select for low, normal, or high) for either:
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

**Visualisation not available for printing**

**References**


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Maternal and child health indicators

Smoking during pregnancy (PI11)

This indicator is the proportion of female Indigenous regular clients aged 15 and over who gave birth within the previous 12 months and whose smoking status was recorded within the previous 12 months as:

- current smoker
- ex-smoker
- never smoked.

It is collected for age groups:

- 15–19
- 20–24
- 25–34
- 35 and over.

Why not smoking during pregnancy is important?

Tobacco smoking is the smoking of tobacco products, including packet cigarettes, roll-your-own cigarettes, cigars or pipes.

Tobacco smoking during pregnancy is the most common preventable risk factor for pregnancy complications, and is associated with poorer perinatal outcomes, including low birthweight, being small for gestational age, pre-term birth and perinatal death (AIHW 2019a; AIHW 2019b). Women who stop smoking during pregnancy can reduce the risk of adverse outcomes for themselves and their babies.

Indigenous mothers are more likely to smoke during pregnancy than non-Indigenous mothers. However, the proportion of Indigenous mothers who smoke during pregnancy is decreasing (since 2010, when data first became available) (AIHW 2019c).

At June 2019, 48% of Indigenous regular clients who gave birth in the previous 12 months were a current smoker in the previous 12 months.

Smoking during pregnancy, by reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients who gave birth in the last year by their smoking status in the last year (current smoker, ex-smoker, never smoked) and reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

This was lowest in:

- New South Wales/Australian Capital Territory (combined) (44%)
- Major cities (42%).

It was highest in:

- the Northern Territory (52%)
- Remote areas (53%).

Smoking during pregnancy, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients who gave birth in the last year by their smoking status in the last year (select for current smoker, ex-smoker, or never smoked) for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by age group (15–19, 20-24, 25-34, 35+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing
References


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Maternal and child health indicators

Child immunisation (PI04)

This indicator is the proportion of Indigenous child regular clients who were ‘fully immunised’.

It is collected for age groups:

- 12–<24 months
- 24–<36 months
- 60–<72 months.

Why child immunisation is important?

Vaccination initiates the body’s natural defence mechanism—the immune response—to build resistance to specific infections (immunise). It is a safe and effective way to protect against harmful communicable diseases.

Immunisation also helps to protect people who are not immunised through a process called ‘herd immunity’, where enough people are immunised against a disease to stop the infection from spreading. Herd immunity helps to protect those more at risk of getting the disease, as well as those who are unvaccinated, so that those who are too young or too sick to be vaccinated can be protected. Outbreaks can occur where there is low immunisation coverage.

Children who do not receive complete and timely vaccinations are at risk of contracting vaccine-preventable diseases and the short and long-term health consequences associated with these (AIHW 2019a; AIHW 2019b). Data from the Australian Immunisation Register (AIR) show indicate that Indigenous children aged 2 have lower rates of full immunisation than non-Indigenous children (88% compared with 91%) (AIHW 2019a). Indigenous childhood immunisation rates fluctuated between 2009 and 2018, decreasing from 90% in 2009 to 86% in 2015, before increasing to 88% in 2018.

At June 2019, 73% of Indigenous child regular clients aged 12–72 months were fully immunised:

- 74% aged 12–<24 months
- 75% aged 24–<36 months
- 70% aged 60–<72 months.

However, this indicator captures far fewer cases of fully immunised Indigenous children than the Australian Immunisation Register (AIR). Anecdotal evidence suggests that not all organisations rely on their internal Clinical Information Systems (CIS) to track immunisation status. Also, in some instances, nKPI organisations might not be the only or the major vaccination provider, which reduces the priority that some organisations give to maintaining immunisation status information within their CIS. This indicator may therefore be an underestimate (see AIHW 2018 for more information).

Visualisation not available for printing

Fully immunised children, by reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients aged 12–72 months who were fully immunised by age group (12–24 months, 24–36 months, 60–72 months) and reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

Full immunisation of Indigenous children aged 12–72 months was highest in South Australia (91%) and lowest in Queensland (61%).

Fully immunised children, by either state/territory or remoteness, reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients aged 12–72 months who were fully immunised by age group (12–24 months, 24–36 months, 60–72 months) for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.
Maternal and child health indicators

MBS health assessment aged 0–4 (PI03)

This indicator is the proportion of Indigenous regular clients aged 0–4 for whom a MBS health assessment for Aboriginal and Torres Strait Islander people (MBS item 715) was claimed within the previous 12 months.

Why health checks are important?

Through Medicare (MBS item 715), Aboriginal and Torres Strait Islander people can receive Indigenous-specific health checks from their doctor, as well as referrals for Indigenous-specific follow-up services (AIHW 2019).

The aim of the Indigenous-specific health check is to encourage early detection and treatment of common conditions that cause ill health and early death.

At June 2019, 38% of Indigenous regular clients aged 0–4 had a MBS health assessment (MBS item 715) in the previous 12 months.

MBS health assessment (item 715)—aged 0–4, by reporting period

This Tableau visualisation shows the percentage of Indigenous child regular clients aged 0–4 who had a MBS health assessment for Aboriginal and Torres Strait Islander people (MBS item 715) in the previous 12 months by reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

This was highest in:

- Queensland (43%)
- Inner regional areas (43%).

It was lowest in:

- Western Australia (33%)
- Very remote areas (31%).

MBS health assessment (item 715)—aged 0–4, by either state/territory or remoteness, reporting period

This Tableau visualisation shows the percentage of Indigenous child regular clients aged 0–4 who had a MBS health assessment for Aboriginal and Torres Strait Islander people (MBS item 715) in the previous 12 months for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

Reference


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Preventative health indicators

Preventative health indicators in the nKPIs consist of 6 process-of-care and 4 health-outcome indicators.

The following boxes show key results for Indigenous regular clients. Click on a box to get more information on the associated indicator.

**Smoking status recorded**
- Had their smoking status recorded in the last year
- Process-of-care indicator
  - **AUDIT-C result**: 49%
  - Had a high-risk AUDIT-C result in the last 2 years
  - Health-outcome indicator

**Smoking status result**
- Were a current smoker in the last 2 years
  - Health-outcome indicator

**Alcohol consumption recorded**
- Had their alcohol consumption status recorded in the last 2 years
  - Process-of-care indicator

**Cervical screening**
- Of females had a cervical screening test in the last 5 years
  - Health-outcome indicator
  - Process-of-care indicator
  - **43%**: 35%

**Immunised against influenza**
- Aged 50 and over were immunised against influenza
  - Process-of-care indicator
  - **38%**: 38%

**MBS health assessment**
- Aged 25 and over had a MBS health assessment claimed in the last 2 years
  - Process-of-care indicator

**CVD risk assessment**
- Had risk factors recorded to enable CVD assessment
  - Process-of-care indicator

**CVD risk assessment result**
- Had a high absolute cardiovascular risk in the last 2 years
  - Health-outcome indicator
BMI of overweight or obese

71%

had their BMI classified as overweight or obese in the last 2 years

Health-outcome indicator

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Preventative health indicators

Smoking (PI09 and PI10)

Indicators related to smoking and preventative health in the nKPI are:

- the proportion of Indigenous regular clients aged 15 and over whose smoking status was recorded within the previous 24 months
- the proportion of Indigenous regular clients aged 15 and over whose smoking status was recorded within the previous 24 months as current smoker, ex-smoker or never smoked.

Why not smoking is important?

Tobacco smoking is the smoking of tobacco products, including packet cigarettes, roll-your-own cigarettes, cigars or pipes.

It is an important cause of preventable ill health and death in Australia and is a leading risk factor for the development of many chronic health conditions and premature. Health conditions often affected by tobacco smoking include many types of cancer, respiratory disease and heart disease.

It is estimated that over one third of the overall disease burden experienced by Indigenous Australians could be prevented by removing exposure to risk factors, such alcohol use (AIHW 2016).

Smoking status recorded (PI09)

This indicator is the proportion of Indigenous regular clients aged 15 and over whose smoking status was recorded within the previous 24 months.

It is collected for males and females in age groups:

- 15-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65 and over.

At June 2019, 82% of Indigenous regular clients aged 15 and over had their smoking status recorded within the previous 24 months.

Smoking status recorded, by reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients aged 15 and over who had their smoking status recorded in the last 2 years by reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

This was highest in:

- Western Australia (93%)
- Major cities and Inner regional areas (both 90%).

It was lowest in:

- the Northern Territory (68%)
- Very remote areas (64%).

Smoking status recorded, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients aged 15 and over who had their smoking status recorded in the last 2 years for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.
The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (15-24, 25-34, 35-44, 45-54, 55-64, 65+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Smoking status result (PI10)
This indicator is the proportion of Indigenous regular clients aged 15 and over whose smoking status was recorded within the previous 24 months as:

- current smoker
- ex-smoker
- never smoked.

It is collected for males and females in age groups:

- 15-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65 and over.

At June 2019, 52% of Indigenous regular clients aged 15 and over were current smokers, 33% had never smoked and 15% were ex-smokers.

Smoking status result, by smoking status and reporting period
This Tableau visualisation shows the percentage of Indigenous regular clients aged 15 and over who had their smoking status recorded in the last 2 years by smoking status result (current smoker, ex-smoker, never smoked) and reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Being a current smoker was lowest in:
- New South Wales/the Australian Capital Territory (combined) and Queensland (both 50%)
- Major cities (48%).

It was highest in:
- South Australia (59%)
- Remote and Very remote areas (both 55%).

Smoking status result, by smoking status and either state/territory or remoteness, reporting period
Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients aged 15 and over who had their smoking status recorded in the last 2 years by smoking status result (select for current smoker, ex-smoker, or never smoked) for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (15-24, 25-34, 35-44, 45-54, 55-64, 65+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

References
Preventative health indicators

Alcohol consumption (PI16 and PI17)

Indicators related to alcohol consumption in the nKPI are:

- the proportion of Indigenous regular clients aged 15 and over who had their alcohol consumption status recorded within the previous 24 months
- the proportion of Indigenous regular clients aged 15 and over whose smoking status was recorded within the previous 24 months as current smoker, ex-smoker or never smoked.

Why recording alcohol consumption and level is important?

Alcohol consumption refers to the consumption of drinks containing ethanol, commonly referred to as alcohol. The quantity, frequency or regularity with which alcohol is drunk provides a measure of the level of alcohol consumption.

AUDIT-C is a screening tool used to help identify hazardous drinking or active alcohol use disorders. It is scored on a scale of 0–12. A total score of 4 or more in males and 3 or more in females is considered positive. Generally the higher the score, the more likely it is that the person’s drinking is affecting their safety (RACGP 2015).

The harmful use of alcohol has both short-term and long-term health effects. Short-term effects are mainly related to potential injury suffered by the drinker and/or others who may be affected by the drinker’s behaviour. Over the longer term, harmful drinking may result in alcohol dependence and other chronic conditions, such as high blood pressure, cardiovascular diseases, cirrhosis of the liver, types of dementia, mental health problems and various cancers. Excessive drinking can impair judgment and coordination, and contributes to crime, violence, anti-social behaviours and accidents. Alcohol use during pregnancy is associated with severe adverse perinatal outcomes, such as foetal alcohol syndrome and alcohol-related birth defects and developmental disorders.

It is estimated that over one third of the overall disease burden experienced by Indigenous Australians could be prevented by removing exposure to risk factors, such as alcohol use (AIHW 2016).

Alcohol consumption recorded (PI16)

This indicator is the proportion of Indigenous regular clients aged 15 and over who had their alcohol consumption status recorded within the previous 24 months.

It is collected for males and females in age groups:

- 15–24
- 25–34
- 35–44
- 45–54
- 55–64
- 65 and over.

At June 2019, 62% of Indigenous regular clients aged 15 and over had their alcohol consumption status recorded within the previous 24 months.

Alcohol consumption status recorded, by reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients aged 15 and over who had their alcohol consumption status recorded in the last 2 years by reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

This was highest in:

- Western Australia (82%)
- Major cities (67%).

It was lowest in:

- the Northern Territory (54%)
- Very remote areas (52%).
Alcohol consumption status recorded, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients aged 15 and over who had their alcohol consumption status recorded in the last 2 years for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (15-24, 25-34, 35-44, 45-54, 55-64, 65+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

AUDIT-C result (PI17)

This indicator is the proportion of Indigenous regular clients aged 15 and over who had an AUDIT-C result recorded in the previous 24 months with a score of:

- high risk—4 or more in males and 3 or more in females
- low risk—less than 4 in males and less than 3 in females.

It is collected for males and females in age groups:

- 15-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65 and over.

At June 2019:

- 51% of Indigenous regular clients aged 15 and over had an AUDIT-C result of low risk
- 49% had a result of high risk.

Alcohol consumption status recorded, by reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients aged 15 and over who had an AUDIT-C result recorded in the last 2 years by AUDIT-C result (low risk, high risk) and reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Having a low risk AUDIT-C result was highest in:

- New South Wales/the Australian Capital Territory (combined, 52%)
- Major cities (55%).

It was lowest in:

- Victoria/Tasmania (combined, 48%)
- Very remote areas (46%).

AUDIT-C result, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients aged 15 and over who had an AUDIT-C result recorded in the last 2 years by AUDIT-C result (low risk, high risk) in the last 2 years for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (15-24, 25-34, 35-44, 45-54, 55-64, 65+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

References
Preventative health indicators

MBS health assessment (item 715)—aged 25 and over (PI03)

This indicator is the proportion of Indigenous regular clients aged 25 and over for whom a MBS health assessment for Aboriginal and Torres Strait Islander people (MBS item 715) was claimed within the previous 24 months.

It is collected for males and females in age groups:
- 25–34
- 35–44
- 45–54
- 55–64
- 65 and over.

Why health checks are important?

Through Medicare (MBS item 715), Aboriginal and Torres Strait Islander people can receive Indigenous-specific health checks from their doctor, as well as referrals for Indigenous-specific follow-up services (AIHW 2019).

The aim of the Indigenous-specific health check is to encourage early detection and treatment of common conditions that cause ill health and early death—for example, diabetes and heart disease.

At June 2019, 54% of Indigenous regular clients aged 25 and over had a MBS health assessment for Aboriginal and Torres Strait Islander people (MBS item 715) claimed within the previous 24 months.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

This was highest in:
- Queensland (64%)
- Major cities (63%).

It was lowest in:
- South Australia (42%)
- Very remote areas (42%).

MBS health assessment (item 715)—aged 25 and over, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients aged 25 and over who had a MBS health assessment for Aboriginal and Torres Strait Islander people (MBS item 715) in the last 2 years for either:
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 and June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (15–24, 25–34, 35–44, 45–54, 55–64, 65+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

Reference

Preventative health indicators

Cardiovascular disease (CVD) risk assessment (PI20 and PI21)

Indicators related to CVD risk assessment in the nKPI are:

- the proportion of Indigenous regular clients aged 35-74 with no known history of CVD who had information available to calculate their absolute CVD risk in the previous 24 months
- the proportion of Indigenous regular clients aged 35-74 with no known history of CVD who had an absolute CVD risk recorded as high, moderate or low in the previous 24 months.

Why CVD risk assessment is important?

Cardiovascular disease (CVD) is a major cause of disease and death in Australia. CVD includes a range of conditions that affect the heart and blood vessels. The most common and serious types of CVD include coronary heart disease, stroke and heart failure.

CVD is preventable in many cases, as a number of its risk factors are modifiable, such as overweight and obesity, tobacco smoking, high blood pressure, high blood cholesterol, insufficient physical activity, poor nutrition and diabetes.

Absolute CVD risk assessment combines risk factors to calculate the probability that an individual will develop a cardiovascular event or other vascular disease within a specified time frame (usually five years) ([RACGP 2018](#)).

Indigenous Australians generally have CVD hospitalisation and death rates that are almost twice as high as non-Indigenous Australians ([AIHW 2019](#)).

Cardiovascular disease (CVD) risk assessment (PI20)

This indicator is the proportion of Indigenous regular clients aged 35-74 with no known history of CVD who had information available to calculate their absolute CVD risk in the previous 24 months.

It is collected for males and females in age groups:

- 35-44
- 45-54
- 55-64
- 65-74.

At June 2019, 50% of Indigenous regular clients aged 35-74 with no known history of CVD had information available to calculate their absolute CVD risk in the previous 24 months.

CVD risk assessment, by reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients aged 35-74 with no known history of CVD who had information available to calculate their absolute CVD risk in the last 2 years by reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

This was highest in:

- the Northern Territory and Western Australia (both 57%)
- Remote areas (60%).

It was lowest in:

- Victoria/Tasmania (combined, 39%)
- Inner regional areas (45%).

CVD risk assessment, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients aged 35-74 with no known history of CVD who had information available to calculate their absolute CVD risk in the last 2 years for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).
Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (35-44, 45-54, 55-64, 65-74).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

**Cardiovascular disease risk assessment result (PI21)**

This indicator is proportion of Indigenous regular clients aged 35-74 with no known history of CVD who had an absolute CVD risk recorded in the previous 24 months as:

- high—greater than 15% chance of a cardiovascular event in the next 5 years
- medium—10–15% chance of a cardiovascular event in the next 5 years
- low—less than 10% chance of a cardiovascular event in the next 5 years.

It is collected for males and females in age groups:

- 35–44
- 45–54
- 55–64
- 65–74.

At June 2019, 59% of Indigenous regular clients aged 35-74 with no known history of CVD who had an absolute CVD risk recorded in the previous 24 months had a low absolute CVD risk, 6% moderate, and 35% high.

**CVD risk assessment result, by reporting period**

This Tableau visualisation shows the percentage of Indigenous regular clients aged 35-74 with no known history of CVD who had information available to calculate their absolute CVD risk in the last 2 years by CVD risk assessment result (low, medium, high) and reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

**Having a low absolute CVD risk was highest in:**

- Victoria/Tasmania (combined, 69%)
- Inner regional areas (67%).

**It was lowest in:**

- South Australia (49%)
- Very remote areas (53%).

**CVD risk assessment result, by either state/territory or remoteness, reporting period**

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients aged 35-74 with no known history of CVD who had information available to calculate their absolute CVD risk in the last 2 years by CVD risk assessment result (low, medium, high) for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (35-44, 45-54, 55-64, 65-74).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

**References**


Preventative health indicators

Cervical screening (PI22)

This indicator is the proportion of female Indigenous regular clients aged 20–74 who have not had a hysterectomy and who had cervical screening within the previous 2, 3 and 5 years.

It is collected for females in age groups:

- 20–24
- 25–34
- 35–44
- 45–54
- 55–64
- 65–69
- 70–74.

Why cervical screening is important?

Cervical screening aims to detect and treat precancerous abnormalities that might otherwise progress to cervical cancer. Indigenous women generally experience a high burden from cervical cancer compared with non-Indigenous women (AIHW 2019).

The National Cervical Screening Program (NCSP), which aims to reduce mortality from cervical cancer, was originally targeted at women aged 20–69 for a 2-yearly Papanicolaou (Pap) smear, or ‘Pap test’, to detect precancerous abnormalities of the cervix. From 1 December 2017, the NCSP changed to 5-yearly cervical screening for women aged 25–74 using a primary human papilloma virus (HPV) test with partial HPV genotyping and reflex liquid-based cytology triage.

A National HPV Vaccination Program was introduced on 1 April 2007 to immunise girls (and extended in 2013 to also immunise boys) against HPV types 16, 18, 6 and 11 (with an HPV vaccine against 9 HPV types introduced from 2018). While the HPV vaccine is very effective at protecting against the 2 most common cervical cancer-causing types of HPV, it doesn’t protect against all types of HPV that can lead to cervical cancer. This means that both HPV-vaccinated and unvaccinated women are recommended to have regular Cervical Screening Tests (the Pap test replacement) to reduce their risk of developing cervical cancer.

From the June 2018 collection, this indicator was revised to align with the new NCSP. This resulted in additional screening points (at 2, 3 and 5 years) being collected, along with continuing to collect for clients aged 20–24, for an interim period until all women could be expected to have moved across to the new requirements under the NCPS.

At June 2019, 34% of female Indigenous regular clients aged 20–74 who have not had a hysterectomy had cervical screening within the previous 3 years. However, this is affected by a change in cervical screening guidelines and the way it was collected in the nKPIs (see Technical notes for more information).

Cervical screening, by reporting period

This Tableau visualisation shows the percentage of female Indigenous regular clients aged 20–74 who have not had a hysterectomy by time period of screening (2 years, 3 years, 5 years) and reporting period (December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

This was highest in:

- the Northern Territory (44%)
- Very remote areas (39%).

It was lowest in:

- New South Wales/the Australian Capital Territory (combined, 28%)
- Inner regional and Outer regional areas (both 30%).

Cervical screening, by either state/territory or remoteness, reporting period

This Tableau visualisation shows the percentage of female Indigenous regular clients aged 20–74 who have not had a hysterectomy by time period of screening (2 years, 3 years, 5 years) for either:
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either December 2018 or June 2019 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

Reference

Last updated 12/06/2020 v8.0
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Preventative health indicators

Immunised against influenza—aged 50 and over (PI14)

This indicator is the proportion of Indigenous regular clients aged 50 and over who had an influenza immunisation within the previous 12 months. It is collected for males and females.

Why immunisation against influenza is important?

Influenza (the flu) is a contagious respiratory disease that causes seasonal epidemics in Australia. Anyone can be infected with influenza but some people, such as Indigenous Australians, have a higher chance of serious illness and complications, such as pneumonia. Some people with influenza die as a result of their infection. Annual vaccination is the best way to prevent severe infections, hospitalisation and death due to influenza.

While immunisation against influenza is recommended for all Indigenous people aged 6 months and over, it is particularly important for those who are at a greater risk of complications from influenza infection, such as those aged 50 and over. Influenza vaccination substantially reduces the risk of hospitalisation and death from influenza and pneumonia for older Indigenous Australians (AIHW 2018).

At June 2019, 38% of Indigenous regular clients aged 50 and over had an influenza immunisation within the previous 12 months.

Immunised against influenza—aged 50 and over, by reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients aged 50 and over who had an influenza immunisation in the last year by reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

This was highest in:
- the Northern Territory (46%)
- Very remote areas (43%).

It was lowest in:
- New South Wales/the Australian Capital Territory (combined, 31%)
- Inner regional and Outer regional areas (both 34%).

Immunised against influenza—aged 50 and over, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients aged 50 and over who had an influenza immunisation in the last year for either:
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

Reference

Preventative health indicators

Body Mass Index (BMI) classified as overweight or obese (PI12)

This indicator is the proportion of Indigenous regular clients aged 25 and over who had their Body Mass Index (BMI) classified as overweight or obese within the previous 24 months.

It is collected for males and females in age groups:

- 25–34
- 35–44
- 45–54
- 55–64
- 65 and over.

Why not being overweight or obese is important?

Excess weight, especially obesity, is a major risk factor for cardiovascular disease, type 2 diabetes, some musculoskeletal conditions and some cancers. As the level of excess weight increases, so does the risk of developing these conditions. In addition, being overweight or obese can hamper the ability to control or manage chronic conditions.

Indigenous Australians are more likely to be overweight or obese than non-Indigenous Australians. It is estimated that over one third of the overall disease burden experienced by Indigenous Australians could be prevented by removing exposure to risk factors such as high body mass (AIHW 2016).

At June 2019, 71% of Indigenous regular clients aged 25 and over had their BMI classified as overweight or obese within the previous 24 months:

- 27% as overweight
- 44% as obese.

BMI classified as overweight or obese, by reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients aged 25 and over who had their BMI classified as overweight or obese in the last 2 years by BMI (overweight, obese) and reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

This was lowest in:

- the Northern Territory (62%)
- Very remote areas (66%).

It was highest in:

- New South Wales/the Australian Capital Territory (combined, 75%)
- Major cities and Inner regional areas (both 75%).

BMI classified as overweight or obese, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients aged 25 and over who had their BMI classified as overweight or obese in the last 2 years by BMI (overweight, obese) for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (25-34, 35-44, 45-54, 55-64, 65+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.
Chronic disease management indicators

Chronic disease management indicators in the nKPIs consist of 6 process-of-care and 3 health-outcome indicators.

The following boxes show key results for Indigenous regular clients. Click on a box to get more information on the associated indicator.

- **MBS General Practitioner Mgmt. Plan (item 721)**
  - with type 2 diabetes had a MBS General Practitioner Management Plan claimed in the last 2 years
  - Process-of-care indicator

- **MBS Team Care Arrangement (item 723)**
  - with type 2 diabetes had a MBS Team Care Arrangement claimed in the last 2 years
  - Process-of-care indicator

- **Blood pressure result recorded**
  - with type 2 diabetes had their blood pressure result recorded in the last 6 months
  - Process-of-care indicator

- **HbA1c result recorded**
  - with type 2 diabetes had their HbA1c result recorded in the last 6 months
  - Process-of-care indicator

- **Kidney function test recorded**
  - with type 2 diabetes had a kidney function test recorded in the last year
  - Process-of-care indicator

- **Kidney function test result (eGFR)**
  - with type 2 diabetes had a normal eGFR test result in the last year
  - Health-outcome indicator

- **Blood pressure result**
  - with type 2 diabetes had a blood pressure result within recommended guidelines in the last 6 months
  - Health-outcome indicator

- **HbA1c result**
  - with type 2 diabetes had a HbA1c result within recommended guidelines in the last 6 months
  - Health-outcome indicator
Kidney function test result (ACR)

44% with type 2 diabetes had a normal ACR test result in the last year

Health-outcome indicator

Kidney function test result (eGFR)

with CVD had a normal eGFR test result in the last year

Health-outcome indicator

Immunised against influenza

36% with type 2 diabetes were immunised against influenza

Process-of-care indicator

with COPD were immunised against influenza

Process-of-care indicator
Chronic disease management indicators

MBS General Practitioner Management Plan (item 721)—type 2 diabetes (PI07)

This indicator is the proportion of Indigenous regular clients with type 2 diabetes for whom a General Practitioner Management Plan (MBS item 721) was claimed within the previous 24 months.

It is collected for males and females in age groups from 0-4 to 65 and over. It is presented here for males and females in age groups:

- under 35
- 35-44
- 45-54
- 55-64
- 65 and over.

Why MBS General Practitioner Management Plan (item 721) is important?

It is estimated that 64% of the burden of disease among Indigenous Australians is due to chronic disease (AIHW 2016).

Effective management of chronic disease can delay the progression of disease, decrease the need for high-cost interventions, improve quality of life, and increase life expectancy. The development of a GP Management Plan is one way in which appropriate care can be planned.

The MBS General Practitioner Management Plan (item 721) provides a rebate for a GP to prepare a management plan for a patient who has a chronic or terminal medical condition with or without multidisciplinary care needs.

At June 2019, 56% of Indigenous regular clients with type 2 diabetes had a MBS item 721 claimed within the previous 24 months.

MBS General Practitioner Management Plan (item 721)—type 2 diabetes, by reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients with type 2 diabetes who had a MBS item 721 in the last 2 years by reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

This was highest in:

- Queensland (64%)
- Major cities (63%).

It was lowest in:

- South Australia (47%)
- Inner regional and Very remote areas (both 53%).

MBS General Practitioner Management Plan (item 721)—type 2 diabetes, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients with type 2 diabetes who had a MBS item 721 in the last 2 years for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (<35, 35-44, 45-54, 55-64, 65+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

Reference
Chronic disease management indicators

MBS Team Care Arrangement (item 723)—type 2 diabetes (PI08)

This indicator is the proportion of Indigenous regular clients with type 2 diabetes for whom a Team Care Arrangement (MBS item 723) was claimed within the previous 24 months.

It is collected for males and females in age groups from 0-4 to 65 and over. It is presented here for males and females in age groups:
- under 35
- 35-44
- 45-54
- 55-64
- 65 and over.

Why MBS Team Care Arrangement (item 723) is important?

It is estimated that 64% of the burden of disease among Indigenous Australians is due to chronic disease (AIHW 2016).

Effective management of chronic disease can delay the progression of disease, decrease the need for high-cost interventions, improve quality of life, and increase life expectancy. As good quality care for people with chronic disease can involve multiple health-care providers across multiple settings, the development of multidisciplinary care plans is one way in which appropriate care can be arranged and coordinated.

A Team Care Arrangement (TCA) provides a rebate for a GP to coordinate the preparation of a TCA for a patient who has a chronic or terminal medical condition who requires ongoing care from a multidisciplinary team of at least three health or care providers.

A person who has a chronic or terminal medical condition (with or without multidisciplinary care needs) can have a GP Management Plan (GPMP) service. A person with a chronic or terminal medical condition and complex care needs, requiring care from a multidisciplinary team, can have a GPMP and Team Care Arrangements (TCAs).

At June 2019, 53% of Indigenous regular clients with type 2 diabetes had a MBS item 723 claimed within the previous 24 months.

MBS Team Care Arrangement (item 723)—type 2 diabetes, by reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients with type 2 diabetes who had a MBS item 723 in the last 2 years by reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

This was highest in:
- Queensland (61%)
- Major cities (59%).

It was lowest in:
- South Australia (45%)
- Inner regional and Very remote areas (both 50%).

MBS Team Care Arrangement (item 723)—type 2 diabetes, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients with type 2 diabetes who had a MBS item 723 in the last 2 years for either:
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (<35, 35-44, 45-54, 55-64, 65+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.
Chronic disease management indicators

Blood pressure result—type 2 diabetes (PI23 and PI24)

Indicators related to blood pressure in the nKPIs are:

- the proportion of Indigenous regular clients with type 2 diabetes whose blood pressure result was recorded in the last 6 months
- the proportion of Indigenous regular clients with type 2 diabetes whose blood pressure result recorded in the last 6 months was less than or equal to 130/80mmHg.

Why blood pressure result is important?

Blood pressure is the force exerted by the blood on the walls of the arteries and is written as systolic/diastolic (for example, 120/80 mmHg, stated as ‘120 over 80’). High blood pressure—also known as hypertension—is a risk factor for chronic conditions, including stroke, coronary heart disease, heart failure and chronic kidney disease.

People with type 2 diabetes have a higher risk of developing high blood pressure. The RACGP diabetes management guidelines currently recommend a target blood pressure of 130/80 mmHg for people with type 2 diabetes (RACGP 2016). Managing a healthy blood pressure can reduce the risk and slow the progression of chronic conditions, such as cardiovascular disease, nephropathy, and diabetic eye disease.

Blood pressure result recorded—type 2 diabetes (PI23)

This indicator is the proportion of Indigenous regular clients with type 2 diabetes whose blood pressure result was recorded in the last 6 months.

It is collected for males and females in age groups from 0-4 to 65 and over. It is presented here for males and females in age groups:

- under 35
- 35–44
- 45–54
- 55–64
- 65 and over.

At June 2019, 67% of Indigenous regular clients with type 2 diabetes had their blood pressure result recorded in the last 6 months.

Blood pressure result recorded—type 2 diabetes, by reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients with type 2 diabetes who had their blood pressure recorded in the last 6 months by reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

This was highest in:

- Queensland (71%)
- Major cities and Remote areas (both 70%).

It was lowest in:

- the Northern Territory (62%)
- Very remote areas (63%).

Blood pressure result recorded—type 2 diabetes, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients with type 2 diabetes who had their blood pressure recorded in the last 6 months for either:

- state/territory (NSW/ACT, Vic., Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (<35, 35–44, 45-54, 55–64, 65+).
Blood pressure result—type 2 diabetes (PI24)

This indicator is the proportion of Indigenous regular clients with type 2 diabetes whose blood pressure result recorded in the last 6 months was less than or equal to 130/80mmHg.

It is collected for males and females in age groups:

- under 35
- 35–44
- 45–54
- 55–64
- 65 and over.

At June 2019, 40% of Indigenous regular clients with type 2 diabetes had a blood pressure result recorded in the last 6 months of less than or equal to 130/80mmHg.

Blood pressure result—type 2 diabetes, by reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients with type 2 diabetes who had a blood pressure result of less than or equal to 130/80mmHg in the last 6 months by reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

This was highest in:

- the Northern Territory (44%)
- Remote and Very remote areas (both 42%).

It was lowest in:

- Queensland and New South Wales/the Australian Capital Territory (both 38%)
- Major cities (37%).

Blood pressure result—type 2 diabetes, by either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients with type 2 diabetes who had a blood pressure result of less than or equal to 130/80mmHg in the last 6 months for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (<35, 35–44, 45–54, 55–64, 65+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Reference


Last updated 4/06/2020 v7.0
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Chronic disease management indicators

HbA1c measurement—type 2 diabetes (PI05 and PI06)

Indicators related to HbA1c in the nKPI are:

- the proportion of Indigenous regular clients with type 2 diabetes who had a HbA1c measurement result recorded within the previous 6 months or within the previous 12 months
- the proportion of Indigenous regular clients with type 2 diabetes who had a HbA1c measurement result recorded within the previous 6 months or within the previous 12 months that was within specified ranges.

Why HbA1c is important?
The HbA1c (glycosylated haemoglobin or glycated haemoglobin) blood test gives an indication of whether blood glucose levels have been higher than normal over the preceding 6-8 weeks by looking at how much sugar (glucose) is bound in red blood cells. It is regarded as the gold standard for assessing glycaemic control.

People who have diabetes need this test regularly to see if their levels are staying within range and whether they need to adjust their diabetes management. The general glycated haemoglobin (HbA1c) target in people with type 2 diabetes is ≤53 mmol/mol (≤7%) (RACGP, 2016).

HbA1c result recorded—type 2 diabetes (PI05)

This indicator is the proportion of Indigenous regular clients with type 2 diabetes who had a HbA1c measurement result recorded within the previous 6 months or within the previous 12 months.

It is collected for males and females in age groups from 0-4 to 65 and over. It is presented here for males and females in age groups:

- under 35
- 35-44
- 45-54
- 55-64
- 65 and over.

At June 2019:

- 52% of Indigenous regular clients with type 2 diabetes had a HbA1c measurement result recorded within the previous 6 months
- 67% of Indigenous regular clients with type 2 diabetes had a HbA1c measurement result recorded within the previous 12 months.

HbA1c result recorded—type 2 diabetes, by time period and reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients with type 2 diabetes who had a HbA1c measurement result recorded by time period of measurement (select for 6 months or 12 months) and reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

Having a HbA1c measurement result recorded within the previous 6 months was highest in:

- Western Australia (56%)
- Major cities and Remote areas (both 54%).

It was lowest in:

- New South Wales/the Australian Capital Territory (combined, 49%)
- Inner regional areas (50%).

Having a HbA1c measurement result recorded within the previous 12 months was highest in:

- Queensland and Western Australia (both 72%)
- Remote areas (70%).

It was lowest in:
the Northern Territory (62%)
Inner regional areas (63%).

HbA1c result recorded—type 2 diabetes, by time period and either state/territory or remoteness, reporting period

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients with type 2 diabetes who had a HbA1c measurement result recorded by time period of measurement (select for 6 months or 12 months) for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (<35, 35-44, 45-54, 55-64, 65+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

HbA1c result—type 2 diabetes (PI06)

This indicator is the proportion of Indigenous regular clients with type 2 diabetes who had a HbA1c measurement result recorded within the previous 6 months or within the previous 12 months (mmol/mol):

- ≤53 (≤7%)
- >53–≤64 (>7%–≤8%)
- >64–<86 (>8%–<10%)
- ≥86 (>10%).

It is collected for males and females in age groups:

- under 35
- 35-44
- 45-54
- 55-64
- 65 and over.

At June 2019:

- 39% of Indigenous regular clients with type 2 diabetes had a HbA1c measurement result of ≤53 mmol/mol recorded within the previous 6 months
- 39% had a HbA1c measurement result of ≤53 mmol/mol recorded within the previous 12 months.

HbA1c result—type 2 diabetes, by time period and reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients with type 2 diabetes who had a HbA1c measurement result recorded by time period of measurement (select for 6 months or 12 months), HbA1C result in mmol/mol (≤53, >53–≤64, >64–<86, ≥86), and reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

Having a HbA1c measurement result of ≤53 mmol/mol recorded within the previous 6 months was highest in:

- New South Wales/the Australian Capital Territory (combined, 45%)
- Inner regional areas (46%).

It was lowest in:

- South Australia (34%)
- Very remote areas (34%).

Having a HbA1c measurement result of ≤53 mmol/mol recorded within the previous 12 months was highest in:

- New South Wales/the Australian Capital Territory (combined) and Victoria/Tasmania (combined) (both 46%)
- Inner regional areas (47%).

It was lowest in:

- South Australia (36%)
- Very remote areas (35%).
Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients with type 2 diabetes who had a HbA1c measurement result recorded by time period of measurement (select for 6 months or 12 months), HbA1C result in mmol/mol (select for ≤53, >53–≤64, >64–<86, or ≥86) for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (<35, 35–44, 45–54, 55–64, 65+).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

Reference

Last updated 10/06/2020 v6.0
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Chronic disease management indicators

Kidney function test—type 2 diabetes or CVD (PI18 and PI19)

Indicators related to kidney function tests in the nKPI are:

- **Type 2 diabetes:**
  - the proportion of Indigenous regular clients aged 15 and over with type 2 diabetes who had an estimated glomerular filtration rate (eGFR) recorded and/or an albumin/creatinine ratio (ACR) or other micro albumin test result recorded within the previous 12 months
  - the proportion of Indigenous regular clients aged 15 and over with type 2 diabetes who had an eGFR recorded within the previous 12 months within a specified range
  - the proportion of Indigenous regular clients aged 15 and over with type 2 diabetes who had an ACR recorded within the previous 12 months within a specified range.

- **CVD:**
  - the proportion of Indigenous regular clients aged 15 and over with CVD who had an eGFR recorded within the previous 12 months
  - the proportion of Indigenous regular clients aged 15 and over with CVD who had an eGFR test recorded within the previous 12 months within a specified range.

Why testing kidney function is important?

Type 2 diabetes and CVD can damage the kidneys. If kidney disease is diagnosed early, appropriate treatment can be given and its effects can be closely monitored. Indigenous Australians, especially those living in remote areas, are at an increased risk of CKD (AIHW 2019).

RACGP guidelines recommend an annual screening of kidney function in patients with CVD and type 2 diabetes for albuminuria by ACR (spot urine sample), and annual estimation of the eGFR (RACGP 2016).

A ‘normal’ eGFR result is considered to be $\geq 60$ mL/min/1.73 m$^2$ (Kidney Health Australia 2015).

Very low values for ACR (<2.5 for males or <3.5 for females) generally indicate that kidney function is normal if other tests of kidney function also show no abnormality. A moderately increased ACR indicates an early phase of developing kidney disease. Very high values indicate that kidney disease is present in a more severe form.

Kidney function test recorded—type 2 diabetes or CVD (PI18)

This indicator is:

- the proportion of Indigenous regular clients aged 15 and over with type 2 diabetes who had an eGFR and/or ACR or other micro albumin test result recorded within the previous 12 months; and
- the proportion of Indigenous regular clients aged 15 and over with CVD who had an eGFR recorded within the previous 12 months.

It is collected for males and females in age groups from 15–24 to 65 and over. It is presented here for males and females in age groups:

- under 35
- 35–44
- 45–54
- 55–64
- 65 and over.

At June 2019:

- 64% of Indigenous regular clients aged 15 and over with type 2 diabetes had an eGFR recorded and/or ACR or other micro albumin test result recorded within the previous 12 months
- 62% of Indigenous regular clients aged 15 and over with CVD had an eGFR recorded test result recorded within the previous 12 months.

Visualisation not available for printing

Having an eGFR and/or ACR or other micro albumin test result recorded within the previous 12 months for clients with type 2 diabetes was highest in:

- Western Australia (69%)
- Major cities and Remote areas (both 66%).

It was lowest in:
• Victoria/Tasmania (combined, 59%)
• Inner regional areas (60%).

Having an eGFR test result recorded within the previous 12 months for clients with CVD was highest in:
• Western Australia (68%)
• Remote areas (69%).

It was lowest in:
• New South Wales/the Australian Capital Territory (combined, 55%)
• Inner regional areas (54%).

**Visualisation not available for printing**

**Kidney function test result (eGFR)—type 2 diabetes or CVD (PI19-A)**

This indicator is the proportion of Indigenous regular clients aged 15 and over with type 2 diabetes or CVD who had an eGFR test result recorded within the previous 12 months of (mL/min/1.73m²):
• ≥90
• ≥60–<90
• ≥45–<60
• ≥30–<45
• ≥15–<30
• <15.

It is collected for males and females in age groups from 15-24 to 65 and over. It is presented here for all Indigenous regular clients aged 15 and over.

At June 2019:
• 81% of Indigenous regular clients aged 15 and over with type 2 diabetes had an eGFR test result recorded within the previous 12 months of ≥60 mL/min/1.73m²
• 77% of Indigenous regular clients aged 15 and over with CVD had an eGFR test result recorded within the previous 12 months of ≥60 mL/min/1.73m².

**Kidney function test result (eGFR)—type 2 diabetes and CVD—≥60/mL/min/1.73m², by time period and reporting period**

This Tableau visualisation shows the percentage of Indigenous regular clients aged 15 and over with either type 2 diabetes or CVD who had an eGFR kidney function test result of ≥60/mL/min/1.73m² in the last year by reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

**Visualisation not available for printing**

Having an eGFR result of ≥60 mL/min/1.73m² within the previous 12 months for clients with type 2 diabetes ranged from:
• 83% in New South Wales/the Australian Capital Territory, South Australia and the Northern Territory to 79% in Queensland and Western Australia
• from 84% in Major cities to 79% in Remote areas.

Having an eGFR result of ≥60 mL/min/1.73m² within the previous 12 months for clients with CVD ranged from:
• 79% in the Northern Territory to 75% in Western Australian
• 81% in Major cities to 75% in both Remote and Very remote areas.

**Kidney function test result (eGFR)—type 2 diabetes or CVD, by result level and either state/territory or remoteness, reporting period**

This Tableau visualisation shows the percentage of Indigenous regular clients aged 15 and over with either type 2 diabetes or CVD who had an eGFR kidney function test result by result level in mL/min/1.73m² (select by ≥90, ≥60–<90, ≥45–<60, ≥30–<45, ≥15–<30, or <15) for either:
• state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
• remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

**Visualisation not available for printing**

**Kidney function test result (ACR)—type 2 diabetes (PI19-B)**

This indicator is:
the proportion of male Indigenous regular clients aged 15 and over with type 2 diabetes who had an albumin/creatinine ratio (ACR) recorded within the previous 12 months of (mg/mmol):
- <2.5
- ≥2.5–≤25
- >25.
the proportion of female Indigenous regular clients aged 15 and over with type 2 diabetes who had an albumin/creatinine ratio (ACR) recorded within the previous 12 months with a result of (mg/mmol):
- <3.5
- ≥3.5–≤35
- >35.

It is collected for males and females in age groups from 15-24 to 65 and over. It is presented here for all Indigenous regular clients aged 15 and over.

At June 2019, 44% of Indigenous regular clients aged 15 and over with type 2 diabetes had an albumin/creatinine ratio (ACR) recorded within the previous 12 months of <2.5 for males or <3.5 for females.

Kidney function test result (ACR)—type 2 diabetes, by time period and reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients aged 15 and over with type 2 diabetes who had an ACR kidney function test result in the last year by ACR result and reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

This was highest in:
- New South Wales/the Australian Capital Territory (combined) and Victoria/Tasmania (combined) (both 57%)
- Major cities and Inner regional areas (both 56%).

It was lowest in:
- the Northern Territory (35%)
- Very remote areas (34%).

Kidney function test result (ACR)—type 2 diabetes, by result level and either state/territory or remoteness, reporting period

This Tableau visualisation shows the percentage of Indigenous regular clients aged 15 and over with type 2 diabetes who had an ACR kidney function test result in the last year, select for ACR result for either:
- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).

Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected.

Data supporting this visualisation are available in Excel supplementary data tables at Data.

Visualisation not available for printing

References


Last updated 10/06/2020 v13.0
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**Chronic disease management indicators**

**Immunised against influenza—type 2 diabetes or COPD (PI15)**

This indicator is the proportion of Indigenous regular clients aged 15-49 with type 2 diabetes or chronic obstructive pulmonary disease (COPD) who had an influenza immunisation within the previous 12 months.

It is collected for males and females in age groups from 15-24 to 45-49. It is presented here for males and females in age groups:

- under 35
- 35-44
- 45-49.

**Why immunisation against influenza is important?**

Influenza (the flu) is a contagious respiratory disease that causes seasonal epidemics in Australia. Anyone can be infected with influenza but some people, such as Indigenous Australians, have a higher chance of serious illness and complications, such as pneumonia. Some people with influenza die as a result of their infection. Annual vaccination is the best way to prevent severe infections, hospitalisation and death due to influenza.

While immunisation against influenza is recommended for all Indigenous people aged 6 months and over, it is particularly important for those who are at a greater risk of complications from influenza infection, such as those with diabetes and COPD. Influenza vaccination substantially reduces the risk of hospitalisation and death from influenza and pneumonia for people with type 2 diabetes and COPD (AIHW 2018).

At June 2019:

- 36% of Indigenous regular clients aged 15-49 with type 2 diabetes had an influenza immunisation within the previous 12 months
- 38% of Indigenous regular clients aged 15-49 with COPD had an influenza immunisation within the previous 12 months.

**Immunised against influenza—type 2 diabetes or COPD, by reporting period**

This Tableau visualisation shows the percentage of Indigenous regular clients aged 15-49 with either type 2 diabetes or COPD who were immunised against influenza in the last year by reporting period (June 2017, December 2017, June 2018, December 2018 and June 2019).

Data supporting this visualisation are available in Excel supplementary data tables at Data.

**Visualisation not available for printing**

Influenza immunisation for those with type 2 diabetes was highest in:

- the Northern Territory (42%)
- Very remote areas (41%).

It was lowest in:

- New South Wales/the Australian Capital Territory (combined, 26%)
- Inner regional areas (27%).

Influenza immunisation for those with COPD was highest in:

- the Northern Territory (51%)
- Very remote areas (49%).

It was lowest in:

- New South Wales/the Australian Capital Territory (combined, 28%)
- Inner regional and Outer regional areas (both 29%).

**Immunised against influenza—type 2 diabetes or COPD, by either state/territory or remoteness, reporting period**

Two Tableau visualisations are presented here. The first shows the percentage of Indigenous regular clients aged 15-49 with either type 2 diabetes or COPD who were immunised against influenza in the last year for either:

- state/territory (NSW/ACT, Vic, Qld, WA, SA, Tas, NT, Australia)
- remoteness area (Major cities, Inner regional, Outer regional, Remote, Very remote, Australia).
Reporting periods of either June 2017, December 2017, June 2018, December 2018 or June 2019 can be selected. The second visualisation shows the selected information from the first visualisation by sex (male, female) and age group (<35, 35–44, 45–49). Data supporting this visualisation are available in Excel supplementary data tables at Data.

Reference
Health services funded under the Indigenous Australians’ Health Programme (IAHP) collect and supply important Indigenous health data sets to the Department of Health as part of their funding agreements. These are the:

- Aboriginal and Torres Strait Islander National Key Performance Indicators (nKPI)—a set of indicators that are collected twice a year at the health service level and which aggregate information on the regular clients that a health service sees.
- Aboriginal and Torres Strait Islander health organisations: Online Services Report (OSR)—responses to an annual questionnaire that contains information about the organisations that provide primary health care services for Indigenous Australians.

This chapter contains information to aid interpretation of the OSR and nKPI collections. Specific information on data quality for each collection period can be found in the data quality statements for each collection period available on the AIHW’s Metadata Online Registry (METeOR).
Technical notes

Interpreting OSR data

It is important that the following issues be considered when interpreting the OSR data presented in this report.

General notes

OSR data are collected using a web-based reporting tool designed to capture information about organisations funded by the Australian Government to provide health services to Aboriginal and Torres Strait Islander people. Data for a small number of non-Indigenous clients attending these services are also included.

A characteristic of the collection is that the number of organisations submitting data changes slightly each year. While for the most part, it is the same organisations contributing to the collection, the number of organisations may change due to changes in funding, auspicing or reporting arrangements at the local level.

Another characteristic of the collection is that the organisations submitting valid data for a particular data item may change over time. This is because data with remaining quality issues at the cut-off date for each collection are excluded from national analyses. This means that in each year some organisations' data are partially accepted rather than fully accepted. Both the changing organisations in scope for the collection and the changing number of organisations with valid data for each data item may impact time series analyses. In this report, time series analyses are based on all the organisations that provide valid data in each year, rather than on a subset which have valid data over all years.

All OSR data in this report exclude that from organisations receiving funding only for maternal and child health services.

Changes to collection in 2018–19

In 2018–19, the OSR collection underwent significant change and was scaled back to include only ‘core’ items. Items dropped include the substance use and social and emotional wellbeing modules, and the services provided and cultural safety items. Plans are underway to reintroduce key items in a staged approach over the next few years.

Also, collections prior to 2018–19 had maternal and child health (MCH) questions in a separate module to preventative health (PH). In 2018–19 these were combined but the data range MCH services were required to report was only focused on what they received MCH funding for, not through all types of PH services the health organisation offered.

Episodes of care

While the collection and validation processes for most years have been similar, episodes of care data for 2016–17 are not comparable with other years because changes were made to the types of contacts that were counted as an episode of care and to how episodes of care were defined and recorded within some clinical information systems. This meant some contact types (for example, health care delivered over the telephone and hospital-related contacts) were excluded from the episode of care count in some organisations. These changes resulted in an expected decrease in episodes of care counts in 2016–17. There was however also an unexpected decrease in episode counts in a few organisations using Medical Director (MD), where some clinical contacts were not counted in their episodes of care data as they should have been. These led to lower numbers of episodes of care recorded and potential undercounts for some services in 2016–17. In 2017–18, these contact types were again included in the episodes of care count and the extraction issues around episodes of care counts were resolved.

Data quality and exclusions

In 2018–19, by the final cut-off date for submissions, most organisations (98%) had provided data that could be included in national analyses. The remaining 2% (5 organisations) had a total of 10 data items excluded from national analyses due to remaining data quality issues (some organisations had more than one item excluded). Exclusion rates vary by data item.

Common data quality queries received during data submission were around incomplete or inaccurate data (for example, workforce positions were not reported or were reported in terms of the number of people rather than full-time equivalent positions); data discrepancies between two or more questions (for example, the number of clients exceeded the number of episodes of care); and large increases or decreases in data compared with previous submissions. Where significant data quality issues remained after follow-up, these data were excluded from national analyses.
Interpreting nKPI data

The nKPIs cover 15 process-of-care and 9 health-outcome indicators organised under three domains (Table A1).

<table>
<thead>
<tr>
<th>Maternal and child health indicators</th>
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<tbody>
<tr>
<td><strong>Process-of-care indicators</strong></td>
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<td>PI13: First antenatal visit</td>
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<td>PI01: Birthweight recorded</td>
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<td>PI04: Child immunisation</td>
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<td>PI03: MBS health assessment—aged 0-4</td>
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<th>Preventative health indicators</th>
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<tr>
<td><strong>Process-of-care indicators</strong></td>
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<tr>
<td>PI09: Smoking status recorded</td>
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<td>PI16: Alcohol consumption recorded</td>
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<td>PI03: MBS health assessment—aged 25 and over</td>
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<td>PI20: CVD risk assessment recorded</td>
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<tr>
<th>Chronic disease management indicators</th>
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<tr>
<td><strong>Process-of-care indicators</strong></td>
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<tr>
<td>PI07: General Practitioner Management Plan—type 2 diabetes</td>
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<tr>
<td>PI08: Team Care Arrangement—type 2 diabetes</td>
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<td>PI23: Blood pressure recorded—type 2 diabetes</td>
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<td>PI05: HbA1c result recorded—type 2 diabetes</td>
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<tr>
<td>PI18: Kidney function test recorded—type 2 diabetes or CVD</td>
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<tr>
<td>PI15: Immunised against influenza—type 2 diabetes or COPD</td>
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</table>

The nKPIs, like performance indicator systems generally, are useful but imperfect measures of system characteristics that are agreed to be important. To maximise their usefulness, it is important to understand where and how nKPI data may depart from the reality that the indicators are trying to measure. As such, the following issues should be considered when interpreting the nKPI data presented in this report.

General issues

- The number of organisations that provided valid data are different for different indicators. This means that the analysis of results for each indicator may not be based on the same number of organisations.
- Due to the small number of nKPI reporting organisations, data for Tasmania are combined with that for Victoria and data for the Australian Capital Territory are combined with that for New South Wales.
- There might be double-counting of the same client at multiple organisations due to a high level of mobility among Indigenous Australians. Nationally, the extent of this is unknown and difficult to quantify.
- Where an organisation has a small denominator—that is, fewer than 20 Indigenous regular clients—small changes in the numerator can have a large impact on the overall proportion for that organisation.
For the most recent data, June 2018, the proportion of organisations with a denominator of fewer than 20 Indigenous regular clients exceeded 10% of all contributing organisations for 12 of the 24 indicators. One indicator measure, PI15: Immunised against influenza—clients with COPD, had 78% of organisations with a denominator of fewer than 20 Indigenous regular clients. This was higher than for all other measures.

Due to the way in which data have been extracted for organisations funded by the Northern Territory Government since December 2015 (the exclusion of measurements or tests conducted outside an individual organisation), results might be underestimated for:

- PI03: MBS health assessment—aged 0-4
- PI05: Glycated haemoglobin (HbA1c) result recorded
- PI07: General Practitioner Management Plan
- PI08: Team Care Arrangement
- PI09: Smoking status recorded
- PI14: Immunised against influenza—aged 50 and over
- PI15: Immunised against influenza—clients with type 2 diabetes or COPD
- PI16: Alcohol consumption status recorded
- PI22: Cervical screening
- PI23: Blood pressure result recorded—clients with type 2 diabetes.

Starting with the June 2017 collection, changes were made to the electronic data extraction method for most organisations. AIHW analysis identified time-series anomalies that indicated that the change in extraction method constitutes a break in series. This means that the June 2017 collection represents a new baseline for the collection moving forward, as data from earlier collections are not comparable with data from June 2017 onwards.

Until June 2016, the nKPI data were extracted from health organisations’ clinical software systems, largely by a single tool, PenCAT. This tool was compatible with Medical Director, Best Practice, PractiX, Communicare and a version of Medinet. Some organisations also submitted manually. Organisations using MMEx transmitted data directly.

For the June 2017 nKPI data collection, the Department of Health introduced a new direct load reporting process, which allowed Communicare, Medical Director and PCIS clinical software systems to generate nKPI data within their clinical system and transmit it directly. Best Practice organisations were provided with the Telstra Health tool, Elicio, to extract, transform and send their data. Some Best Practice organisations used a Structured Query Language script developed by the Improvement Foundation in conjunction with the manual submission form. Some changes were made to the MMEx extraction process as a result of the Data Validation Project. All of the main clinical information systems now have direct load ability, and data validation is a significant and ongoing process for nKPI and OSR direct load data.

MBS items are not claimed by all organisations, either because they do not have a general practitioner (GP) present, they are not eligible to claim them, or clients are seen by other clinicians. As a result, the indicators based on MBS items might not reflect all related health care activities carried out in an organisation. These indicators include MBS health assessment (item 715), GPMPs (item 721) and TCAs (item 723). In the case of child health checks, children may receive comprehensive health checks provided within a model of care that does not suit or allow for the check to be claimed as an MBS item. MBS health checks are counted in Communicare at a point in the process before its submission. Only claims explicitly discarded after a rejection are subsequently excluded (DMA 2017). The impact of this has not been quantified.

GP availability might be limited in some areas, and have an impact on the results reported by organisations. For example, limited GP availability might affect an organisation being able to claim MBS items (child and adult health checks, GPMPs, and TCAs).

Shared care arrangements between hospitals and primary health care organisations, between primary health care organisations, or between primary health care organisations and other providers of similar care are not consistently supported by automatic data sharing. This could lead to lower rates of data recording for some indicators, such as birthweight results and antenatal care. Similarly, it will be difficult for organisations to obtain information on their regular clients who may choose to receive cervical screening elsewhere.

Smoking status categories are not yet fully agreed on. For example, there is not yet universally accepted guidance on how long a person needs to have quit smoking to be considered an ex-smoker rather than a smoker. An increased number of types of ex-smokers might improve data quality, and lead to more frequent updating of clients’ records.

Small denominators can cause fluctuations in data over time, therefore results should be interpreted with caution.
- For maternal and child health indicators, 10%-57% of organisations contributing to these indicators in June 2018 had denominators of fewer than 20 clients.
- For preventative health indicators, 1%-27% of organisations contributing to these indicators in June 2018 had denominators of fewer than 20 clients.
- For chronic disease management indicators 7%-18% of organisations contributing to these indicators in June 2018 had denominators of fewer than 20 Indigenous regular clients.

For services using MMEx, data quality issues were identified which affected data submitted in collections from June 2019 and earlier for the following indicators:
- PI09 Smoking status recorded
- PI10 Smoking status result
- PI11 Smoking status of women who gave birth within the previous 12 months
- PI16 Alcohol consumption recorded
- PI17 AUDIT-C (alcohol consumption) results.

These submitted data had values drawn from all available time periods rather than the last 24 months. Data for all periods shown in this report exclude services affected by this issue. As such, data for previous periods may differ from previously published data.
Regular clients

A regular client is defined as a person who has attended a particular primary health care organisation at least 3 times in the previous 2 years. Starting from the June 2018 collection, the definition of a regular client excludes deceased patients. All of the indicators, except the 2 birthweight indicators, use the regular client definition. The following points should be noted when interpreting results:

- The concept of a visit varies within CISs, and might be captured differently for services, clinical items, diagnoses, clinical procedures, episodes of care, client contact, and other variables used in CIS data (DMA 2017). Vendors have been addressing these issues but any subsequent residual impact on results has not been quantified.
- During the June 2018 collection, updates to the clinical software Medical Director Insights and the Communicare Launchbar were released. These updates meant that deceased patients were excluded from the regular client count. However, 10 organisations submitted nKPI data using an older version of MD Insights and 22 organisations submitted nKPI data using an older version of the Communicare Launchbar. Deceased clients may have been included in data for these organisations. At the national level, this may lead to an overrepresentation of the number of regular clients and a lower proportion of people receiving appropriate health care.
- There are various scenarios where a client would or would not be considered a regular client, which should be considered when interpreting the data. These might include the following:
  - Some clients might attend an organisation 3 times in 2 years, but have another primary health care organisation as their primary place of care. At the organisational level, this provides an invalid measure of the extent to which a person is receiving appropriate care from the provider they visit 3 or more times, but which is not their main provider. Examples include where a patient declines a particular service, having recently received it at their usual health organisation, or a clinician being able to see results due to a linked CIS or shared electronic health records. At the national level, this will lead to double-counting of that person and underestimate the national proportion of people who are receiving appropriate health care.
  - Some clients might be transient and stay in a community only temporarily. Organisations with a large proportion of transient clients who are counted as regular clients might appear to have poorer results than other organisations, as they have less capacity to follow up on patients, including those with chronic diseases. These organisations might also choose to allow a client’s usual primary health care organisation to provide some MBS item services, including health checks, General Practitioner Management Plans (GPMPs), and Team Care Arrangements (TCAs). This would underestimate the national proportion of people who are receiving appropriate health care. Analysis of data in 2016 found that the nKPI definition leads to a higher count of regular clients for many indicators compared with a definition that restricts the denominator to the usual clients of a health care organisation. The impact of this was that out of a possible 24 measures, 21 measures had better results when the definition was restricted (see AIHW 2017).
  - Clients might access different health care organisations in the same general location, and might not use the same organisation consistently. They might use various organisations for different purposes; for example, favouring one when they want increased privacy and another because it bulk bills (Bailie et al. 2013). This behaviour might be more common in regions with more health care options, and less frequent in areas where local health care options are more limited (for example, Very remote areas). This could result in variations in the make-up of regular clients between regions.
  - Organisations operating out of regional centres in a given remoteness area (for example, Alice Springs, which is classified as a Remote area) might have higher levels of regular clients who are not their usual clients than other Remote organisations. This is because they might be regional centres used in transit, and because they provide a wider array of health care options.

Maternal and child health indicators

- Babies’ records (rather than mothers’ records) are the specified source of data for indicators on birthweight recorded and results. But data from organisations using MMEx source this information from the mothers’ records (DMA 2017). The impact of this on results has not been quantified. The standard nKPI Indigenous regular client definition does not apply to these indicators—the baby is considered a client and counted in the nKPIs even if they attended only once, and their parents are not regular clients of the organisation. This might lead to the inclusion of babies who visited the organisation purely for acute care, and whose carers might not have been able to confirm birthweight.
- Multiple births should not be included in birthweight results, as babies born as part of multiple births are more likely to have a lower birthweight. But Medical Director and Communicare do not exclude multiple births, as this information is not captured in the baby’s record. Nor do Medical Director and Communicare exclude babies with ‘unknown gestational age’ from the low birthweight indicator (DMA 2017). Although this finding was not expected to significantly affect the nKPIs, it is possible it might inflate the proportion of low birthweight babies recorded in the data.
- Babies’ birthweight and antenatal visits data may be underestimated, as results for Northern Territory Government organisations were provided by the Northern Territory Government Midwifery Group Practice, but not entered as having occurred at the client’s usual health centre. This was rectified for some Northern Territory Government organisations in December 2017 but may affect some data included in this report.
- Antenatal visits data for organisations using Communicare and Medical Director may have been affected by data extraction issues related to the recording of the categories ‘No visit recorded’ and ‘Timing of visit not recorded’. The issue was identified in data for June 2017, December 2017 and June 2018. Further information is provided in Chapter 2 of the AIHW (2018) report National Key Performance Indicators for Aboriginal and Torres Strait Islander primary health care: results for 2017.
- Smoking status of women who gave birth in the previous 12 months records smoking status during pregnancy retrospectively, and the information is updated only when women’s smoking status category is changed. Therefore, this indicator is a proxy for smoking during pregnancy.
- Child immunisation data for the nKPI collection indicates that primary health care records are capturing far fewer cases of fully immunised Indigenous children than Australian Immunisation Register (AIR) data. nKPI data may therefore be an underestimate.
Preventative health indicators

- Influenza vaccination does not include clients who are offered a vaccination, but refuse. Also, organisations might not have records of immunisations that occurred at other places, such as workplaces.

- Time-stamped records normally ensure that a record or activity is fairly recent. A number of indicators (smoking status recorded, smoking status result, and alcohol consumption) are based on the most recent record for the client (that is, treated as having been updated in the previous 2 years), regardless of how old that record is. As a result, the indicator might not reflect the current smoking or alcohol consumption status of the Indigenous regular client population, unless the data have been collected recently for all or most clients.

- Differential BMI testing might occur in some organisations where BMI might be more likely to be measured in clients who look underweight, overweight, or obese. This would result in the proportion of overweight or obese Indigenous regular clients being higher than it actually is.

- Recording of alcohol consumption status (PI16) is not restricted to a particular test or format for this indicator. Organisations can use tests such as AUDIT or AUDIT-C, or simply record whether or not the client consumes alcohol. However, for the indicator on AUDIT-C results (PI17), only AUDIT-C results are included. This means that, for some organisations, test results in PI17 are a subset of the tests reporting in PI16.

- Risk factors to enable a CVD risk assessment require information on diabetes status. For the June 2017 collection, MMEx restricted the count of clients with all the necessary risk factor information (that is, the numerator) to clients with a type 2 diabetes diagnosis, leading to an under-count for this indicator. MMEx results for June 2017 are excluded from results presented.

- Absolute cardiovascular risk assessments can be calculated using the NVDPA or the CARPA method. As the CARPA method applies an extra 5% loading for Indigenous Australians, nKPI data should have the 5% loading removed to make the data comparable with NVDPA data. As the PCIS system is unable to deduct the 5% because the data are captured as categorical scores (low, medium, high), organisations using PCIS (predominantly the Northern Territory Government) are not included in the results presented. Additionally, data do not capture clients without known CVD whose risk factors mean they are categorised as ‘high risk’ and therefore do not require a risk assessment.

- CVD risk calculators embedded in some CISs do not capture all the data needed to apply the full NVDPA risk assessment algorithm (Agostino et al. 2020). For national, state and remoteness analysis, data are included only from services with CISs which do capture all the necessary data. Data from services using CISs that do not capture all the necessary data may underestimate the number of clients at high CVD risk.

- Cervical screenings are conducted for female regular clients who are Indigenous, aged 20-74. In June 2018, this indicator was revised to align with the new National Cervical Screening Program (NCSP) where the previous Pap test is replaced by a HPV test from 1 December 2017. The key changes were that:
  - data are to be collected on clients who had either a Papanicolaou smear (Pap test) conducted prior to 1 December 2017 or a human papillomavirus (HPV test) conducted from 1 December 2017
  - the HPV test can be based on a sample collected by a health practitioner or on a self-collected sample
  - the age range for this nKPI indicator has been revised to 20-74 for a transitional period. This is to accommodate the former reporting age range (20-69) and the new age range (25-74).

An update for Medical Director Insights that incorporated the indicator changes was released during the July 2018 submission period. Where organisations were identified as using an older version of this CIS, and therefore submitting data that did not align with the PI22 changes, data were excluded from the results. As a result, the number of cervical screenings may be underrepresented in the results presented. In addition, some data mapping issues related to the pathology codes used were identified for organisations using MMEx. This issue was addressed in August 2018 and some organisations were able to amend data values. The impact of this issue has not been quantified.

Chronic disease management indicators

- Influenza vaccination does not include clients who are offered a vaccination, but refuse. Also, organisations might not have records of immunisations that occurred at other places, such as workplaces.

- Pathology results held at an organisation might not reflect all pathology tests that have occurred for its Indigenous regular clients. Organisations without systems in place might not have recorded the information, or results might not have been picked up accurately.

- Access to allied health providers might be limited in some areas, in which case TCAs might not be practical. This is often the case in remote regions.

- Clinical definitions for type 2 diabetes, CVD and COPD vary across CISs, as different coding schemes are used. Medical Director uses doctor command language (DOCLE) codes, Communicare uses International Classification of Primary Care 2nd edition (ICPC2), and MMEx uses Systematized Nomenclature of Medicine (SNOMED). This leads to some variation in the patients who will be picked up by different CISs (DMA 2017).

- Kidney function test recorded and result (type 2 diabetes and CVD) data were excluded from June 2018 national reporting for organisations using Medical Director Insights v1.5. Kidney function test recorded (type 2 diabetes) has had ongoing data quality issues since June 2017. Because of this, results for this indicator are not presented for June 2017. In December 2017, results from organisations using Best Practice and Medical Director were excluded.

References


Glossary

**Aboriginal and/or Torres Strait Islander:** A person who identified themselves, or was identified by another household member, as being of Aboriginal or Torres Strait Islander origin. See also Indigenous.

**Aboriginal Community Controlled Health Services (ACCHSs):** Health services operated by local Indigenous communities to deliver comprehensive, holistic and culturally appropriate health care to their communities. They range from large services with several medical practitioners who provide a range of services, to small services that rely on nurses and/or Aboriginal health workers to provide most services, and are controlled through a locally elected board of management. For more information see the National Aboriginal Community Controlled Health Organisation (NACCHO) website.

**Aboriginal and Torres Strait Islander health worker:** An Aboriginal and/or Torres Strait Islander person with a minimum qualification in the field of primary health-care work or clinical practice. Aboriginal and Torres Strait Islander health practitioners are one speciality stream of health worker. Health workers liaise with patients, clients and visitors to hospitals and health clinics, and work as a team member to arrange, coordinate and provide health-care delivery in community health clinics.

**Aboriginal and Torres Strait Islander health practitioner:** A person who has completed Certificate IV in Aboriginal and/or Torres Strait Islander Primary Health Care (Practice) and is registered with the Aboriginal and Torres Strait Islander Health Practice Board of Australia. The practitioner may undertake higher levels of clinical assessment and care within their agreed scope of practice. This role became nationally registered from 1 July 2013 under the National Registration and Accreditation Scheme for health professions.

**Accessibility/Remoteness Index of Australia (ARIA):** ARIA measures the remoteness of a point based on the physical road distances to the nearest urban centre in each of 5 size classes. Therefore, not all remoteness areas are represented in each state or territory.

There are 6 remoteness areas in this structure:

- **Major cities**—collection districts (CDs) with an average ARIA index value between 0 and less than or equal to 0.2
- **Inner regional areas**—CDs with an average ARIA index value greater than 0.2 and less than or equal to 2.4
- **Outer regional areas**—CDs with an average ARIA index value greater than 2.4 and less than or equal to 5.92
- **Remote areas**—CDs with an average ARIA index value greater than 5.92 and less than or equal to 10.53
- **Very remote areas**—CDs with an average ARIA index value greater than 10.53
- **Migratory**—composed of offshore, shipping and migratory CDs.

**aged care:** This is defined in the OSR as the organisation routinely provides clinical and support services to older people, including any of the following: coordination of care; assessment, case management, therapy and review; routine management of acute and chronic medical conditions; referral and support to access aged care services; specific group activities for older people; and visiting services to older people at home or in residential aged care facilities.

**albumin/creatinine ratio (ACR):** A measure of renal function that assesses albumin in the urine. A healthy result was considered as less than 2.5 for males and less than 3.5 for females.

**allied health professionals:** Includes professionals working as an audiologist/audiometrist, diabetes educator, dietitian, optometrist, pharmacist, physiotherapist, podiatrist, speech pathologist and ‘other’ allied health professionals not already specified.

**AUDIT-C:** An Alcohol Use Disorders Identification Test screening tool, which is sensitive to the early detection of risky and high-risk (or hazardous and harmful) drinking.

**birth:** Birth of a viable fetus, which is defined as a birth occurring after 20 weeks of pregnancy or the fetus weighing more than 400 grams at birth (live, still, singleton, multiple).

**birthweight:** Birthweight is defined as low (birthweight of less than 2,500 grams), normal (birthweight of 2,500–4,499 grams), or high (birthweight of 4,500 grams and over).

**body mass index (BMI):** A measure of an adult’s weight (body mass) relative to height, used to assess the extent of weight deficit or excess, where height and weight have been measured. BMI is the weight in kilograms divided by the square of the height in metres.

**cardiovascular disease (CVD):** Any disease of the circulatory system, namely the heart (cardio) or blood vessels (vascular).

**cervical screening:** A procedure involving a Pap test or HPV test, which is used to detect cancer and pre-cancerous abnormalities of the cervix.

**chronic obstructive pulmonary disease (COPD):** Serious, progressive and disabling long-term lung disease where damage to the lungs—usually because of both emphysema and chronic bronchitis—obstructs oxygen intake, and causes increasing shortness of breath.
client numbers: Counts how many individuals receive health care by an organisation during the collection period. Each individual is counted as a client once only, regardless of how many times they are seen. Visitors and transient clients are included in client counts, but clients attending group activities only (and who do not receive individual care) are excluded.

client contacts: Counts the client contacts made by each type of health worker from an organisation during the collection period. Includes contacts made by both employed and visiting staff and transport contacts. Contacts made as part of a group are excluded from the count, as are administrative contacts and residential care contacts.

clinical information system (CIS): A computer system used to manage client records.

episodes of care: Counts the episodes of care provided by each organisation during the collection period. This is based on a count of the contacts between an individual client and 1 or more staff providing health care within 1 calendar day. All contacts with the same client on the same day are treated holistically as 1 episode of care. Includes contacts with both employed and visiting staff. Transport-only contacts and those made as part of a group are excluded from the count, as are administrative contacts and residential care contacts.

estimated glomerular filtration rate (eGFR): A measure of how well the kidneys filter waste from the blood. The eGFR is the best measure of kidney function. A result of 60mL/min/1.73m² or over was considered as normal or close to normal.

first antenatal visit: The contact at which the initial antenatal check-ups are done—for example, to confirm pregnancy, establish history, and conduct blood tests.

full-time equivalent (FTE) staff: Counts how many FTE positions an organisation paid the wages or salary for at the 30 June (employed staff), how many staff worked for but were not paid for by the organisation during the collection (visiting staff) and how many vacant positions there were at 30 June. FTE is a standard measure of the size of a workforce that takes into account both the number of workers and the hours that each works. For example, if a workforce comprises 2 people working full-time 40 hours a week and 2 working half-time, this is the same as 3 working full-time—an FTE of 3.

fully immunised: Describes children who have received all immunisations according to the AIR.

- Children aged 12–<24 months are required to have received all immunisations that are due at 6 months:
  - 3 doses of diphtheria, tetanus, and pertussis (whooping cough)
  - 3 doses of polio
  - 2 or 3 doses of haemophilus influenzae type B
  - 2 or 3 doses of hepatitis B.
- Children aged 24–<36 months are required to have received all immunisations that are due at 12 months:
  - 3 doses of diphtheria, tetanus, and pertussis (whooping cough)
  - 3 doses of polio
  - 3 or 4 doses of haemophilus influenzae type B
  - 3 doses of hepatitis B
  - 1 dose of measles, mumps and rubella (MMR).
- Children aged 60–<72 months are required to have received all immunisations that are due at age 4:
  - 4 doses of diphtheria, tetanus, and pertussis (whooping cough)
  - 4 doses of polio
  - 2 doses of measles, mumps and rubella (MMR).

General Practitioner Management Plan (GPMP): Chronic disease management plan carried out according to the MBS Schedule (item 721).

haemoglobin A1c (HbA1c or glycated haemoglobin): A measurement that acts as an indicator of time-averaged blood glucose levels (over the previous 2–3 months). It is used as the best marker of long-term diabetes control (Jones et al. 2011).

health staff: The following positions are counted as ‘health’ staff in this report: Aboriginal and Torres Strait Islander health workers; Aboriginal and Torres Strait Islander health practitioners; doctors/GPs; nurses and midwives; substance misuse and drug and alcohol workers; tobacco workers and coordinators; dentists or dental therapists; dental support workers; sexual health workers; outreach workers; traditional healers; environmental health workers and officers; medical specialists; social and emotional wellbeing staff and counsellors; allied health professionals; health promotion or prevention workers; training or trainee health positions; other health workers (not reported elsewhere).

indicator: See definition for national Key Performance Indicators.

Indigenous: Used interchangeably with Aboriginal and Torres Strait Islander. See also Aboriginal and/or Torres Strait Islander.

influenza: An acute contagious viral respiratory infection marked by fever, muscle aches, headache, cough, and sore throat.

MBS health assessment: Health assessment for those aged 0-4 and 25 and over, which are done according to the MBS Schedule (item 715).

medical specialists: Medical practitioners who are registered as specialists under a law of state or territory or recognised as specialists or consultant physicians by a specialist recognition advisory committee, such as paediatricians, ophthalmologists, cardiologists, ear, nose and throat specialists, obstetricians and surgeons.

national Key Performance Indicators (nKPIs): A set of indicators that monitor the major health issues of the regular client population of Indigenous-specific primary health care organisations.

non-Indigenous: A person who has indicated they are not of Aboriginal and/or Torres Strait Islander origin.
other staff: The following positions are counted as ‘other’ staff in this report: chief executive officers (CEOs); managers and supervisors; drivers and field officers; finance and accounting staff; administrative and clerical staff; information technology (IT) and data management staff; cleaners, security and other support staff; administrative and support trainees.

palliative care: This is defined in the OSR as: the organisation provides clinical management and care coordination, including assessment, triage and referral using a palliative approach for patients with uncomplicated needs associated with a life-limiting illness or end of life care. The organisation also has formal links with a specialist palliative care provider for purposes of referral, consultation and access to specialist care as necessary.

primary health care organisations: Organisations that receive funding from the Australian Government Department of Health to provide primary health care services. While some primary health care organisations constitute an individual health care clinic, others have multiple clinics, and provide combined data for all their clinics. Other nKPI reporting organisations are intermediaries (for example, Primary Health Networks), which might also combine the data for the clinics where they subcontract services.

program: A planned, regular activity organised by an organisation.

regular client: A client who has visited a particular primary health care provider 3 or more times in the previous 2 years.

remoteness areas: The remoteness areas divide Australia into broad geographic regions that share common characteristics of remoteness for statistical purposes. Each state and territory is divided into several regions based on their relative accessibility to goods and services (such as GPs, hospitals and specialist care) as measured by road distance. These regions are based on the Accessibility/Remoteness Index of Australia (ARIA). The main categories are Major cities, Inner regional, Outer regional, Remote, and Very remote. Individual states and territories may not contain areas of every class: for example, the Northern Territory does not contain a Major city or an Inner regional classification.

remoteness structure: One of 7 geographical structures listed in the Australian Standard Geographic Classification. Its purpose is to classify collection districts that share characteristics of remoteness into broad geographical regions called remoteness areas.

service delivery site: Includes all service delivery sites owned, leased or otherwise controlled by an organisation. It does not include outlets or sites only visited by mobile services.

smoking status: Current smoker includes those who smoke daily, weekly, or less often than weekly; ex-smoker refers to a person who does not smoke at all now, but has smoked at least 100 cigarettes, or a similar amount of other tobacco product, in his/her lifetime; never smoked refers to a person who does not smoke now, and has smoked fewer than 100 cigarettes, or a similar amount of other tobacco product, in his/her lifetime.

social and emotional wellbeing (SEWB) staff: These include (but are not limited to) psychologists, counsellors, mental health workers, social workers and welfare workers.

Tackling Indigenous Smoking and Healthy Lifestyle Program: A program funded by the Australian Government focusing on health promotion around smoking and healthy lifestyles to help close the gap between the health of Indigenous Australians and non-Indigenous Australians, and to reduce chronic disease in Aboriginal people. The team is made up of regional tobacco action workers and healthy lifestyle workers, and all are trained outreach Aboriginal health workers.

Tackling Indigenous Smoking Program: Funded by the Australian Government, this targeted activity aims to prevent the uptake of smoking and supports smoking cessation among Aboriginal and Torres Strait Islander people. It is a multi-component program that focuses on evidence-based activities and tobacco reduction outcomes. It uses proven approaches to change smoking behaviours, with activities delivered at multiple levels, including health service funding, workforce training and organisational support, and support for smokers through Quitline funding. The Tackling Indigenous Smoking Program replaces the previous Tackling Indigenous Smoking and Healthy Lifestyle Program.

Team Care Arrangement (TCA): Chronic disease management plan carried out according to the MBS Schedule (item 723).

type 2 diabetes: The most common form of diabetes, occurring mostly in people aged 40 or over, and marked by reduced or less effective insulin.
Data

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