

Evaluation of the Northern Territory Chronic Conditions Prevention and Management Strategy 2010-2020: final report

Northern Territory Department of Health

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1 Executive summary

The Northern Territory (NT) Chronic Conditions Prevention and Management Strategy 2010-2020 (the Strategy) is part of a long-standing effort to address chronic conditions in the NT. The Strategy aims to improve the health and wellbeing of all Territorians by reducing the incidence and impact of chronic conditions. The NT Department of Health (the Department) engaged Nous Group (Nous) to evaluate the Strategy.

An evaluation framework developed by an intersectoral working group articulated a program logic for the Strategy, including its intended outputs and outcomes, as well as quantitative and qualitative indicators. The evidence-base for the evaluation included quantitative data, focus groups and interviews, online surveys, case studies, literature and documentation. Relevant ethical guidelines were adhered to.

The evaluation questions were threefold: First, how well has the Strategy been implemented? Second, what impact has the Strategy achieved? Third, how can the Strategy be improved?

How well has the Strategy been implemented?

The Strategy sought to direct implementation through the identification of 'key action areas' and the provision of more detailed accompanying plans. Its intended users were diverse, including policy makers, health care providers, non-government organisations (NGOs), Aboriginal Community Controlled Health Organisations (ACCHOs), consumers and others. It also presented a high-level roadmap for monitoring and evaluation, including annual monitoring reports, mid-term and final evaluations, and reviews of the implementation plans. A communications strategy was developed outlining how stakeholders would be informed of the Strategy and engaged in its implementation.

In practice, the Strategy has been staged through the intended implementation plans. At the time of this evaluation, understanding of and engagement with the Strategy varied among its stakeholders, generally being greatest among those in leadership positions and in the government sector. This may reflect a lessening of understanding and engagement over the Strategy's long duration. Most stakeholders agreed the Strategy's key action areas remain relevant and provide a sound framework for chronic conditions prevention and management in the NT.

The planned evaluations of the Strategy and reviews of its implementation plans were conducted. The annual monitoring reports that were envisaged were discontinued after three years due to resource constraints. The development of an evaluation framework, which the Strategy stated would be incorporated into an implementation plan, was instead developed to inform the final evaluation.

The Chronic Disease Network Steering Committee (CDNSC), which was intended to govern implementation, instead fulfils advisory, networking and information sharing functions. This implies that responsibility for governance rests with the Department.

Enablers for the implementation of the Strategy included the Department's commitment of resources (though these were nonetheless modest given the scope of activity the Strategy included) and stakeholders' goodwill and support.

Barriers to implementation included the Strategy's complexity, inconsistent monitoring, the rapidly changing environment for health service delivery, and the convolutedness of funding arrangements for chronic conditions prevention and management in the NT.

What impact has the Strategy achieved?

There is evidence of improvement in Territorians' health and wellbeing. Most significantly, relative to national trends, life expectancy improved in the NT for most population groups from 2010 to 2017. Given that chronic conditions are a leading cause of death for both Aboriginal and non-Aboriginal people in the NT, this improvement is likely due at least in part to better chronic conditions prevention and management.

From 2012-13 to 2017-18, rates of potentially preventable hospitalisations due to chronic conditions in the NT remained higher in the NT than nationally. From 2010 to 2018, rates of all hospitalisations due to chronic conditions increased for all population groups (including Aboriginal and non-Aboriginal men and women). Over this same period, for all population groups, there were statistically significant increases in the age-standardised rates of all hospitalisations due to chronic obstructive pulmonary disease (COPD), depression and anxiety, and diabetes; there were also decreases in the age-standardised rates of all hospitalisations due to renal failure, but these were not statistically significant.

From 1999 to 2013, there were statistically significant increases in the age-standardised rates of total years lived with disability (due to all conditions) for both Aboriginal and non-Aboriginal people in Central Australia. There was also an increase for non-Aboriginal people in the Top End, and a decrease for Aboriginal people in the Top End, but these were not statistically significant. In comparison, the age-standardised rate of total years lived with disability nationally was stable from 2003 to 2015.

There were no statistically significant changes in the proportion of low birthweight babies from 2010 to 2017 or in rates of mortality due to chronic conditions from 2010 to 2016.

The outcomes observed in each of the Strategy's key action areas are summarised in Table 1.

Table 1 | Summary of outcomes in each key action area

Key action area	Summary of outcome
1. Social determinants of health	Intersectoral collaboration and partnerships to address social determinants are evident to varying degrees across the NT. There is evidence of improvement in some social determinants, but performance was generally poor to begin with and hence remains low.
2. Primary prevention to prevent and reduce risk factors	There have been improvements in some risk factors, in some locations. For example, there have been reductions in tobacco smoking, but these have been achieved to a lesser extent, if at all, in remote communities.
3. Early detection and secondary prevention	The capability and systems of health service providers to identify and monitor disease markers appear to have improved. Some stakeholders had concerns about the consistency with which detection translates into management.
4. Self-management	There were mixed views about the extent to which self-management is embedded in day-to-day care and whether this has improved. There is also evidence that understanding of the concept of self-management varies.
5. Care for people with chronic conditions	Increasing numbers of GP management plans and team care arrangements provide evidence of increased coordination of care. Stakeholders held mixed views about the extent to which care is accessible, identifying both examples of progress and ongoing barriers. Integration and coordination of care continue to present challenges.
6. Workforce planning and development	Some stakeholders suggested recruitment of appropriately skilled staff had improved. Most agreed retention is an ongoing challenge and turnover is high. There is substantial concern about declining numbers of Aboriginal Health Practitioners (AHPs).
7. Information, communication and disease management systems	Technology has enabled improvements in information sharing and access to care. The use of telehealth has rapidly increased since 2013, though stakeholders identified a range of enablers that must be in place to fully realise its benefits.
8. Continuous quality improvement (CQI)	CQI is embedded in the day-to-day practice of care delivery across the NT, with established activities and processes implemented by health care providers.

The evaluation framework assumed government and non-government stakeholders have used the Strategy to guide their actions, continually realigned their investments to progress the Strategy, and

willingly and actively participated in implementation, monitoring and reporting. Consultations conducted for the evaluation suggest these assumptions are reasonable for the Department, Top End Health Service (TEHS) and Central Australia Health Service (CAHS), and more variable in their applicability to other organisations, among which engagement with the Strategy varied. The Strategy has also been implemented in a rapidly changing environment, with major reforms in health and health service delivery taking place with implications for primary health care and chronic conditions prevention and management. This suggests the Strategy has been an important influence on chronic conditions prevention and management in the NT and that this influence has been greatest in the government sector.

How can the Strategy be improved?

Evidence from a range of sources informed identification of potential improvements to the current Strategy and development of recommendations for the next strategy. These included the findings regarding the Strategy's implementation and impact summarised above, the context the next strategy needs to respond to, stakeholder views on enablers and barriers for chronic conditions prevention and management, and insights from current practice in comparable jurisdictions and from research.

There is a critical ongoing imperative to mitigate the impacts of chronic conditions in the NT. An overarching strategy to guide the efforts of the numerous stakeholders involved in chronic conditions prevention and management continues to be essential. The next strategy should provide a framework to guide the actions of NT health sector organisations while articulating how they will collaborate with organisations in non-health sectors (for example, to improve the social determinants of health), as the current Strategy does.

There is opportunity for the next strategy to build upon the current Strategy by strengthening stakeholder partnerships, engagement, ownership and accountability. This will require:

- a collaborative development process
- fit-for-purpose governance, accountability and reporting arrangements
- monitoring and evaluation that is built-in, conducted consistently and utilised to make ongoing improvements throughout the life of the strategy.

It would be enhanced by a clear picture of the current funding and resourcing for chronic conditions prevention and management in the NT, including how much is being spent by whom and on what. A shorter duration (for example, six years rather than ten) would also help to maintain currency and buy-in over the life of the strategy.

Aboriginal leadership of the strategy and its development will be particularly important. This reflects the disproportionate impacts of chronic conditions on Aboriginal people in the NT and the strong leadership that Aboriginal organisations already exercise in relation to issues such as social determinants.

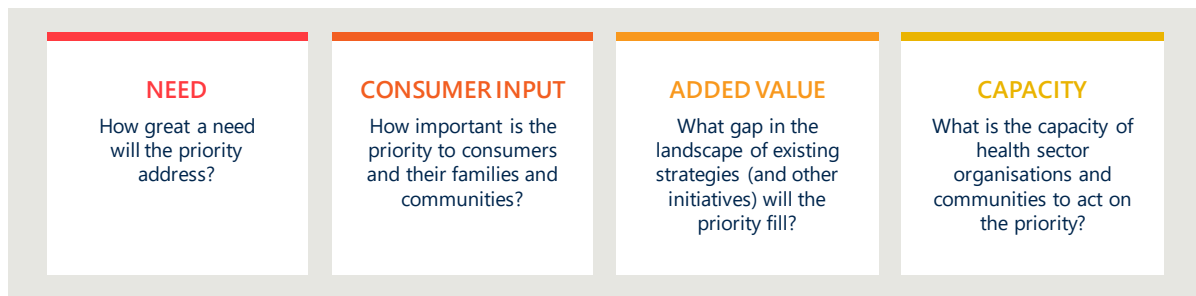
The effectiveness of the next strategy in directing the efforts of stakeholders would be further supported by clearly defining its audience, ensuring its content is clear and accessible, and setting a small number of "best buy" priorities.

The recommendations and their evidence and rationale are presented in Section 2.

High-level framework for the next strategy

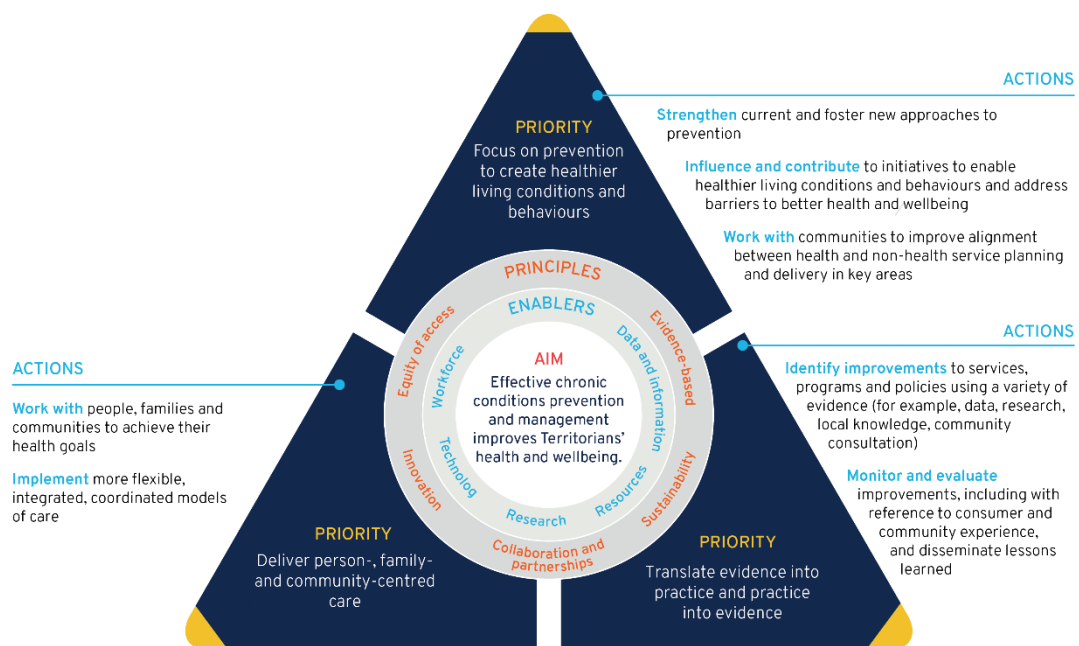
As part of the evaluation process, criteria were developed to guide the selection of priorities for the next strategy (as shown in Figure 1).

Figure 1 | Criteria to guide prioritisation



Based on these criteria, and the evaluation findings and recommendations, an initial set of priorities were identified. A workshop was held to test the criteria and priorities, along with other questions and hypotheses, with NT health sector stakeholders. This informed the development of a high-level framework for the next strategy, which is summarised in Figure 2.

Figure 2 | Overview of proposed framework



This high-level framework provides a starting point for the collaborative development of the next strategy.

2 Recommendations

The recommendations presented in this section are based on the evidence analysed throughout the report (in Sections 3 through 7). The rationale for each recommendation includes reference to the evidence base presented in the section or sections by which it was informed.

2.1 There is ongoing need for a chronic conditions prevention and management strategy in the NT

There is a critical ongoing imperative to mitigate the impacts of chronic conditions in the NT

The Strategy had an important influence on chronic conditions prevention and management over the past decade, which was greatest in the government sector (see Section 6.10). Substantial improvements have been achieved over this period. For example:

- Relative to national trends, there have been increases in life expectancy for Aboriginal men and for non-Aboriginal men and women (see Section 6.1).
- Awareness of social determinants is widespread, and intersectoral action to address them is evident to varying degrees across the NT (see Section 6.2).
- There have been overall reductions in alcohol consumption and tobacco smoking (see Section 6.3).
- There have been large increases in uptake of health checks and care plans (see Sections 6.4 and 6.6).
- The use of telehealth has rapidly increased (see Section 6.8).
- CQI is embedded in the day-to-day practice of care delivery (see Section 6.9).

However, the imperative to address chronic conditions remains critical. The rising burden of chronic conditions in the NT was a key motivator for both the Preventable Chronic Disease Strategy and the current Strategy (see Section 3). The burden of chronic conditions in the NT continues to be substantial for both Aboriginal and non-Aboriginal people.¹ In addition to the substantial improvements noted above, the evaluation identified ongoing challenges; for example, limited improvement in the social determinants (see Section 6.2); persistently high rates of tobacco smoking in remote communities (see Section 6.3); varying understanding of self-management (see Section 6.5), and declining numbers of AHPs (see Section 6.7). Stakeholders also raised concerns about the consistency with which detection translates into management (see Section 6.4), the extent to which care is integrated and coordinated (see Section 6.6) and high rates of workforce turnover (see Section 6.7).

An overarching strategy to guide the efforts of stakeholders involved in chronic conditions prevention and management continues to be essential

While stakeholders varied in their current understanding of and engagement with the current Strategy, almost all agreed there should continue to be a strategy (see Section 5.2). Chronic conditions prevention and management in the NT involves diverse stakeholders across the government, non-government, ACCHOs and other sectors as well as multiple levels of government (see Section 7.1). Their efforts could be directed in many directions and will have greater impact if focused toward shared priorities of the greatest benefit to Territorians' health and wellbeing.

An alternative would be a strategy focusing on prevention of chronic conditions through promotion of health and wellbeing. Strategies of this kind have been implemented in other Australian jurisdictions, including the ACT, NSW, QLD and VIC (see Section 7.3). However, a strategy encompassing both prevention and management remains a necessity in the NT due to its high burden of chronic conditions

¹ Y, Zhao, X Zhang, M Foley and S Guthridge, NT Burden of Disease Study: Fatal Burden of Disease and Injury, 2004-2013, 2016, <https://digitalibrary.health.nt.gov.au/prodjspsui/bitstream/10137/1278/1/Northern%20Territory%20burden%20of%20disease%20study%20Fatal%20burden%20of%20disease%20and%20i...pdf>

and the presence of ongoing challenges cutting across the continuum of care, such as integration and coordination of services, as noted above. A strategy encompassing both prevention and management would also better complement the crowded landscape of existing strategies addressing specific:

- **chronic conditions**; for example, the NT Mental Health Strategic Plan 2019-2025
- **risk factors**; for example, the NT Tobacco Action Plan 2019-2023
- **services**; for example, the NT Renal Services Strategy 2017-2022
- **other issues**; for example, the NT Health Workforce Strategy 2019-2022 and the NT Health Aboriginal Cultural Security Framework 2016-2026 (see Section 7.1).

This is because it could target cross-cutting issues not addressed by these strategies, including co-morbidities, shared risk factors and interventions, and integration and coordination of services.

Recommendation 1: The NT should continue to have a chronic conditions prevention and management strategy.

2.2 The next strategy should guide the NT health sector while complementing intersectoral and non-health activity

The next strategy should continue to seek to provide a framework for an NT health sector-wide response to chronic conditions

Primary health care in the NT is provided by multiple health service providers, including TEHS, CAHS, NT Primary Health Network (NT PHN), General Practitioners (GPs), ACCHOs, NGOs and private providers. The importance of coordination between health service providers will only increase as decision making becomes more localised (for example, due to the transition of services to ACCHOs under the Local Decision Making policy, the Pathways to Community Control policy, and the NT Health Strategic Plan 2018-2022) (see Section 7.1).^{2 3 4}

In addition, ACCHOs are essential partners to achieve important aspirations of the strategy; for example:

- addressing the social determinants, including ensuring equity of access to services
- reducing health inequities between Aboriginal and non-Aboriginal people, including the gap in life expectancy associated with chronic conditions.

The evidence collected for this evaluation highlights the continuing importance of these aspirations; for example, due to the lack of improvement in social determinants (see Section 6.2) and limited success in closing the gap in Aboriginal life expectancy (see Section 6.1).

A whole-of-NT health sector approach is also consistent with the National Strategic Framework for Chronic Conditions, which supports a stronger emphasis on coordinated care across the health sector, as greater cooperation between partners can lead to more successful individual and system outcomes (see Section 7.3).⁵

² Department of Health, Regionalisation and Aboriginal Community Control, 2012, <https://www1.health.gov.au/internet/publications/publishing.nsf/Content/oatsih-chci-ehsdi-toc~oatsih-chci-ehsdi-5~oatsih-chci-ehsdi-5-5>

³ NT Government, Local Decision Making, 2020, <https://ldm.nt.gov.au/about-ldm>

⁴ NT Health, NT Health Strategic Plan 2018-2022, 2018, <https://digitallibrary.health.nt.gov.au/prodjspuj/bitstream/10137/2729/3/Northern%20Territory%20Health%20Strategic%20Plan.pdf>

⁵ Department of Health, National Strategic Framework for Chronic Conditions, 2017, [https://www1.health.gov.au/internet/main/publishing.nsf/Content/A0F1B6D61796CF3DCA257E4D001AD4C4/\\$File/National%20Strategic%20Framework%20for%20Chronic%20Conditions.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/A0F1B6D61796CF3DCA257E4D001AD4C4/$File/National%20Strategic%20Framework%20for%20Chronic%20Conditions.pdf)

Recommendation 2: The next strategy should provide the comprehensive framework to guide the whole of the NT health sector's response to chronic conditions.

The next strategy should articulate how NT health sector organisations will collaborate with organisations in other sectors to address social determinants

Many stakeholders recognised the need for intersectoral or whole-of-government action to address social determinants. Some suggested that the next strategy should take a whole-of-government approach (see Section 6.2).

However, despite the strong relationship between social determinants and chronic conditions, pursuing reform to address social determinants is not primarily the responsibility of the Department or other health sector stakeholders. Major activity is already underway to address issues such as housing; for example, the NT Government is investing \$1.1 billion over ten years in the Remote Housing Investment Package (called 'Our Community. Our Future. Our Homes'), while the Australian Government is investing \$550 million over five years in the National Partnership for Remote Housing Northern Territory 2018-2023 (see Section 6.2). There are also whole-of-government reforms underway that are relevant to social determinants; for example, the Aboriginal Affairs Strategy 2019-2029, the Local Decision Making agenda, and a social outcomes framework, all led by the Department of the Chief Minister (DCM) (see Section 7.3). It would be more effective and efficient for the health sector to complement and link with this activity rather than developing a separate whole-of-government strategy for social determinants.

The Department lacks the convening power of a central agency such as DCM, but it and other health sector organisations) have the knowledge and expertise arising from their responsibility for addressing the consequences of social determinants. This gives health sector stakeholders the authority to exercise influence and undertake advocacy in relation to social determinants. For example, this could include advocating to other agencies and organisations, and providing a health perspective to inform their strategic planning and recognise their successes. It could also include contributing to joint projects to address specific issues, similar to the approach taken in South Australia through the *Health in All Policies* initiative (see Section 7.3).⁶

In addition, health sector stakeholders are already taking action at the local level to address social determinants, but the extent of it appears to vary between locations (see Section 6.2). There would be value in formalising this action – this would help to raise awareness of social determinants, strengthen accountability for action to address and improve the consistency with which such action is undertaken. Despite the belief among some health professionals that their ability to influence social determinants is limited, there are concrete actions they can take at the levels of the patient, the practice and the community. For example, one framework published in the Canadian Medical Association Journal outlines how healthcare workers can enquire about social challenges, refer to other support services, provide accessible and culturally appropriate care, partner with other organisations, and advocate for more supportive and healthy environments (see Section 7.4).

This suggests the next strategy can most effectively influence social determinants by enabling the NT health sector to work with non-health sectors at both the NT and local levels.

The ACCHO sector would ideally lead efforts in this area under the next strategy, due to the relevance of social determinants to Aboriginal Territorians. This would build off the leadership and advocacy already undertaken by organisations such as Aboriginal Medical Services Alliance NT (AMSANT) (see Section 6.2).

Recommendation 3: The next strategy should articulate how the NT health sector will seek to influence social determinants through collaboration with organisations in other sectors. This should

⁶ Government of South Australia, South Australian Health in All Policies Initiative: Case Study, 2013, <https://www.sahealth.sa.gov.au/wps/wcm/connect/f31235004fe12f72b7def7f2d1e85ff8/SA+HiAP+Initiative+Case+Study-PH%26CS-HiAP-20130604.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-f31235004fe12f72b7def7f2d1e85ff8-n5hAxa8>.

include influencing policy and strategy at the national level (for example, Closing the Gap) and the NT level (for example, the social outcomes framework and the NT Housing Strategy 2020-2025), and influencing service planning and delivery at the regional and local level. The ACCHO sector would ideally lead efforts in this area.

2.3 The development, governance, monitoring and evaluation of the next strategy will provide the foundation for its implementation and improvement

The next strategy should be developed through a collaborative approach involving stakeholders from across the NT health sector

The roles of stakeholders throughout the health sector were critical under the current Strategy, as the Strategy was intended to be used as a guide for their planning and decision making. Accordingly, one of the enablers for the implementation of the current Strategy was the goodwill and commitment of its stakeholders. However, at the time of this evaluation, stakeholders also varied in the extent of their engagement with the Strategy. Some indicated they had not used it as a guide (see Section 5).

If the next strategy is to provide a framework for an NT health sector-wide response to chronic conditions, it must engage a wide range of stakeholders and incorporate their perspectives. To create shared ownership, it will be important that stakeholders are involved in a collaborative development process, as was the case in developing the current Strategy. This should provide substantive input into the next strategy itself, but also in how it will be led, governed, monitored and evaluated.

The benefits of a broad-based collaborative development process would include:

- increasing stakeholders' ownership of, and willingness to implement and champion, the strategy
- eliciting a variety of perspectives that will make the strategy more realistic and robust
- improving the chances of leveraging additional funding and resources
- establishing clear roles, responsibilities and accountabilities.

As a result, the process to develop the next strategy will provide the foundation for its dissemination and implementation across the NT.

Stakeholders consulted for this evaluation also identified a need to consult additional stakeholders, including consumers with lived experience of chronic conditions, Aboriginal people and communities, front line health professionals, and other government agencies. Several stakeholders suggested it would be beneficial to involve the NT Aboriginal Health Forum.

Recommendation 4: The Department should collaborate with stakeholders across the NT health sector to develop the next strategy, including how it will be led, governed, monitored and evaluated. Leadership of this process should be shared between stakeholders, particularly with Aboriginal organisations.

The next strategy should improve on the current governance arrangements

Together with the development process for the next strategy, its ongoing governance arrangements will provide the basis for engaging stakeholders and eliciting their views.

The current governance arrangements have changed over time. The original intent was for the CDNSC to be the governance body for the Strategy (see Section 5.1). However, consultations with the CDNSC

members highlighted that they view it as an advisory body (see Section 5.2). This implies that leadership and authority for the Strategy sits with the Department. This may have contributed to the more variable engagement with the Strategy of stakeholders outside government.

The governance of the next strategy should reflect its intention to guide the whole of the NT health sector's response to chronic conditions prevention and management (as per Recommendation 2). In particular, the governance body should:

- have clear leadership and authority for the strategy, with this being shared between members (including Aboriginal organisations)
- have accountability that aligns with this authority
- ensure representation of all stakeholders with roles, responsibilities and accountabilities under the strategy
- include members with a well-rounded mix of skills and experience covering relevant aspects of the strategy (for example, social determinants, risk factors, clinical issues, policy).

CDNSC members valued its advisory function, as well as its networking and information sharing functions (see Section 5.2). It would be worthwhile to maintain these, either as part of the CDNSC or an alternative body. However, it will be important to ensure clarity (for example, what the body advises on and who it advises).

Recommendation 5: The governance of the next strategy should enable clear leadership and authority for the strategy, with this being shared between members (including with Aboriginal organisations). It should ensure representation of all stakeholders with roles, responsibilities and accountabilities under the strategy. It should also include members with skills and experience spanning relevant aspects of the strategy. This body could also consider maintaining clearly defined advisory, networking and information sharing functions (potentially as part of a separate body).

Monitoring and evaluation should be consistently conducted and used to inform implementation and engage stakeholders

Monitoring and evaluation is a critical component of the next strategy, for its owners and stakeholders to know whether the strategy is being implemented effectively, and what impact it is having. Strengths in the monitoring and evaluation of the current Strategy included the production of three monitoring reports, the conduct of both the final evaluation and the development of an evaluation framework. However, there were also inconsistencies:

- The monitoring reports, initially annual, were discontinued due to a lack of funding and resources.
- While the strategy included examples of indicators, they were not reported against, and there were no agreed indicators for implementation.
- While the development of the evaluation framework was intended to be incorporated into the first implementation plan, it was instead undertaken to inform the final evaluation (see Section 5.2).

The next strategy could improve on these arrangements by having a monitoring and evaluation framework developed alongside it, including indicators to monitor implementation and performance. This would ensure the program logic, measures and indicators are known in advance and could be collected and reported to an agreed standard and timeline. It would also enable formative evaluations to drive improvements during the life of the strategy and summative evaluation at the end of the strategy. Establishing the program logic at the outset would also assist in refining the strategy to ensure greatest impact.

Indicators should be manageable in number and drawn from existing sources to reduce the reporting burden on stakeholders and ensure the feasibility of their ongoing collection and monitoring. This is

particularly important given the other health strategies currently in place, which also involve reporting requirements for the next strategy's stakeholders (see Section 7.1).

Regular monitoring reports should be distributed to the governance body and other stakeholders. In addition to supporting the activities of the governance body, this would support engagement with stakeholders by providing them with information that is useful to them. Ideally, the reporting of progress from the monitoring framework would be made publicly available, further strengthening transparency and accountability.

It would also be beneficial to assign clear responsibilities and accountabilities for monitoring and evaluation, not only for undertaking and/or procuring it, but also for providing data to feed into it (for example, from ACCHOs and GPs). This will include the indicators reflecting the whole-of-sector scope of the strategy.

Recommendation 6: A monitoring and evaluation framework should be developed alongside the next strategy as part of implementation. This should include a manageable number of relevant indicators drawn from existing sources to reduce the reporting burden on stakeholders and ensure the feasibility of ongoing data collection. Regular monitoring reports should be distributed to the governance body and other stakeholders to support their activities. A summary of progress, based on the ongoing monitoring, should be made publicly available regularly throughout the life of the strategy. Clear responsibilities and accountabilities for monitoring and evaluation should be assigned, not only for undertaking and/or procuring it, but also for providing data to feed into it.

The next strategy should be informed by a clear understanding of current funding and resourcing and supported by a strong case for continued investment

The increasing volume and complexity of chronic conditions in the NT will continue to place pressure on services and costs. The next strategy will provide a guide for investment (and disinvestment) decisions, influencing where government and stakeholders focus their time, attention and resources. The next strategy is also an opportunity to improve the funding and resourcing arrangements for preventing and managing chronic conditions.

However, this is occurring in a highly constrained fiscal environment, with limited prospects for further funding (see Section 7.1). The next strategy will need to grapple with how to secure additional funding, if possible in the context of firm budgetary constraints, and better allocate existing funding to increase its effectiveness. Its role in supporting stakeholders to focus their efforts on evidence-based strategic priorities will be particularly important in this regard.

This would be supported by health economic analysis of current and projected end-to-end spending on chronic conditions prevention and management in the NT, including how much is being spent by whom and on what. The analysis would build on other health economic analysis, burden of disease studies and research at the NT- and national-levels. Combined with the large body of existing evidence on the long-term costs of chronic conditions, the analysis would be valuable in motivating stakeholders to engage with the next strategy and making the case for continued investment in chronic conditions prevention and management in the NT.

The analysis could be carried out at the same time as the next strategy is being developed, or before it, to inform the direction of the strategy and the stakeholder engagement process.

Recommendation 7: The next strategy should be informed by health economic analysis of current and projected end-to-end investment in chronic conditions prevention and management in the NT.

The next strategy should have a shorter timeframe

The current Strategy adopted a ten-year timeframe in reflection of “the long-term approach that is needed to reduce the incidence and impact of chronic conditions in the population.”⁷

The advantage of such an approach is that it provides certainty for stakeholders and sets an ambitious vision to which they can aspire.

The disadvantage is that it is difficult to sustain stakeholder engagement and commitment over the period of a decade, particularly with the many other changes, trends and initiatives that are likely to occur over that time. As noted in Section 5.2, this was a possible explanation for the difference between the mid-term evaluation, which found the Strategy “facilitates a clear, shared vision...and receives near universal health sector support”, and this evaluation, which found engagement was variable.

Another factor is that even a decade is not necessarily a long enough time to observe the outcomes and impact of the strategy. This is evident in Section 6, where it was stated by some stakeholders that changes observed since 2010 could partly have reflected the current Strategy’s predecessor (the Preventable Chronic Disease Strategy), and that the influence of initiatives implemented under the current Strategy are unlikely to yet be fully evident in indicators such as potentially preventable hospitalisations.

Recommendation 8: The next strategy should have a timeframe of six years, to maintain greater stakeholder engagement. It should be updated after three years based on a formative evaluation and consultation with stakeholders.

2.4 The next strategy should be more targeted towards its intended audience and in its content and priorities

The primary users should include people in decision making and planning roles

The current Strategy states that it is intended to be used by stakeholders ranging from policy makers through to consumers. This is inclusive but also has potential to create unrealistic expectations about what it can achieve. For example, some stakeholders suggested the current Strategy should have provided concrete actions that could be implemented by staff on the ground in organisations. However, this was not its purpose (see Section 5.1).

The next strategy can improve on this situation by more clearly distinguishing its intended users and audience. Given its role focuses on guiding decision making and policies at the level of the health sector and health services, the next strategy should be aimed at leaders, managers, decision-makers and planners in organisations across the NT health sector.

However, the strategy is also an opportunity to educate and to shift the discourse around chronic conditions in the NT. This approach was evident in the current Strategy’s prominent focus on social determinants. For this reason, the next strategy should be made accessible to and informative for a wider audience. One way to achieve this would be through the development of an accessible summary version. For this reason, the next strategy should not preclude reaching a wider audience.

Recommendation 9: The next strategy should be aimed at people engaged in decision making and planning within NT health sector organisations. Consideration should be given to producing a ‘lay person’ summary of the strategy to influence and inform a broader audience.

⁷ Department of Health and Families, NT Chronic Conditions Prevention and Management Strategy 2010-2020, 2009, <https://health.nt.gov.au/professionals/chronic-conditions-health-professionals/chronic-conditions-prevention-and-management>

The content should be as clear and accessible as possible

As noted in Section 5, most stakeholders agreed the key action areas in the Strategy are still relevant and provide a good framework for chronic conditions prevention and management in the NT. However, stakeholders indicated the Strategy's complexity was a barrier to its implementation. The inclusion of numerous overlapping components, including an aim, goals, objectives, principles, key action areas, sub-strategies and (within the implementation plans) additional actions, reduced its clarity and accessibility.

This suggests the next strategy could be made clearer by having fewer components that flow in a logical sequence which readers can grasp easily. For example, it could include:

- a brief, one-sentence aim
- a set of underpinning principles
- a small number of priorities with corresponding activities, outputs and outcomes.

Rather than having separate implementation plans over time, as the current Strategy did, the strategy itself should be updated instead. This reduces the number of documents which stakeholders need to access to understand their role in addressing chronic conditions, increasing the focus on and relevance of the strategy itself.

Increasing the next strategy's accessibility for its target audience could also be enhanced by clearly showing the reader where they fit into the strategy, and what they can do to best address chronic conditions. It would be beneficial for there to be short summaries of the strategy for different audiences, such as senior government leaders, policymakers, service managers, and commissioning bodies. These summaries are more likely to resonate with readers if they are developed collaboratively with them, as per Recommendation 4.

Recommendation 10: The next strategy should be made as clear and accessible as possible. Its components should flow in a logical sequence. Readers should be able to quickly and easily see where they fit into the strategy and its implementation.

The priorities should be ambitious but achievable

The current Strategy takes a broad focus on many topics relating to chronic conditions. This follows from its aim to guide all levels of stakeholders in their work relating to chronic conditions, in the health sector and beyond, over ten years. It also created focus and direction through its eight key action areas. However, these taken together encompass the entire continuum of care (from social determinants and prevention through detection and management), as well as enablers (workforce, technology and CQI).

Each of these are important and deserve a place in the strategy, but this breadth can also create a risk of diluting focus and attention, especially when seeking to influence stakeholders outside the Department. Many stakeholders said articulating priorities would be more useful than articulating many or all improvements that are required, especially given how many other strategies also demand their attention. At more senior levels, this reflected a view that it would be better to achieve more progress in a few high-priority areas than to achieve less progress in many areas.

When questioned about what the next strategy should prioritise, stakeholders in consultations had mixed views. Many suggested a greater focus on primary prevention (including social determinants), some emphasised the importance of continued focus on primary and/or acute care, and others highlighted enablers such as workforce and collaboration. Others suggested the next strategy should address social and emotional wellbeing, cultural determinants of health, and climate health.

Some of the current Strategy's key action areas are already embedded in day-to-day practice (such as early detection, management and CQI). This lessens the need for the next strategy to focus on every point of the continuum of care as well as the enablers. Instead, the next strategy could focus on potential improvements.

Section 8 provides a high-level framework for the next strategy, including priorities identified based on the evidence considered for this evaluation.

Recommendation 11: The next strategy should set a small number of priorities, focusing on the areas where the greatest improvements in Territorians' health and wellbeing can be made.

3 Introduction

The Strategy is part of a long-standing effort to address chronic conditions in the NT. It aims to improve the health and wellbeing of all Territorians by reducing the incidence and impact of chronic conditions. This section provides an overview of the Strategy, including its background and content.

3.1 The Strategy is part of a long-standing effort to address chronic conditions in the NT

The NT Preventable Chronic Disease Strategy was launched in 1999. It was an attempt to improve the prevention, early detection and management of chronic conditions in the NT.⁸ While the trigger for the Preventable Chronic Disease Strategy was rising rates of renal disease, it adopted an integrated approach spanning multiple chronic conditions in recognition of their common underlying risk factors and in line with World Health Organisation recommendations. The Preventable Chronic Disease Strategy provided a model for subsequent efforts to address chronic conditions in Australia, including initiatives such as the National Chronic Disease Prevention Framework and the Australian Medical Association's Policy on Preventable Chronic Disease Strategies in Aboriginal and Torres Strait Islander Peoples.⁹

A 2007 evaluation of the Preventable Chronic Disease Strategy found it had led to:

- improved maternal and child health
- expansion of dedicated chronic disease staff
- development and use of best practice guidelines
- increased vaccination coverage in remote communities
- inclusion of chronic diseases in orientation and training
- more systematic approaches to chronic disease programs in primary health care.¹⁰

It also recommended improvements, including increasing the focus on prevention and health promotion, strengthening partnerships, improving clinical information systems, boosting the capacity of the workforce (particularly the Aboriginal workforce) and developing an implementation plan and evaluation framework.

The current Strategy is a revision of the Preventable Chronic Disease Strategy, building on its strengths. It was informed by evidence including the 2007 evaluation cited above, a 2004 study of the burden of disease in the NT, related initiatives at the national level and in other jurisdictions, consultation with a broad range of stakeholders, and other evidence.¹¹ The NT Department of Health and Families led its development in partnership with AMSANT, Good Health Alliance NT and General Practice Network NT.¹² Its intent is to provide a framework to guide a system-wide response to chronic conditions and identify evidence-based strategies at the individual, population and system levels.

⁸ Department of Health and Families, NT Chronic Conditions Prevention and Management Strategy 2010-2020, 2009, <https://health.nt.gov.au/professionals/chronic-conditions-health-professionals/chronic-conditions-prevention-and-management>

⁹ Weeramanthri, T, Hendy, S, Connors, C, Ashbridge, D, Rase, C, Dunn, M, Fittock, M, Cleary, J, O'Donohoe, L, Morton, S and Swanson, N, The NT Preventable Chronic Disease Strategy – promoting an integrated and life course approach to chronic disease in Australia, *Australian Health Review*, volume 26, number 3, 2003, <https://www.publish.csiro.au/ah/pdf/AH030031>

¹⁰

Department of Health and Families, NT Chronic Conditions Prevention and Management Strategy 2010-2020, 2009, <https://health.nt.gov.au/professionals/chronic-conditions-health-professionals/chronic-conditions-prevention-and-management>

¹¹ Zhao, Y, Guthridge, S, Magnus, A, Vos, T, Burden of Disease and Injury in Aboriginal and Non-Aboriginal Populations in the NT, *The Medical Journal of Australia*, Volume 180, Issue 10, 2004, <https://www.mja.com.au/journal/2004/180/10/burden-disease-and-injury-aboriginal-and-non-aboriginal-populations-northern>

¹² Department of Health and Families, Revision of the Preventable Chronic Disease Strategy – Background Paper: Preventable Chronic Disease in Aboriginal Populations, 2009, <https://digitallibrary.health.nt.gov.au/prodjsui/bitstream/10137/536/1/Preventable%20Chronic%20Diseases%20in%20Aboriginal%20Populations.pdf>

3.2 The Strategy aims to improve the health and wellbeing of all Territorians

The Strategy prioritises seven conditions

The Strategy applies to all chronic conditions; however, it prioritises:

- cardiovascular disease
- rheumatic heart disease
- type 2 diabetes
- chronic airways disease
- chronic kidney disease
- chronic mental illness
- cancers associated with the common risk factors for other chronic conditions.

These conditions were selected because they caused the greatest burden of disease in the NT and share common risk factors, including smoking, nutrition, physical activity, alcohol consumption, social and emotional wellbeing and socio-economic status.¹³

The Strategy articulates goals, principles and key action areas

These are shown in Table 2 below. The principles are intended to underpin all aspects of the Strategy. The key action areas are intended to provide direction for planning, implementation and evaluation.¹⁴

Table 2 | Overview of the Strategy's goals, principles and key action areas

Goals	<ol style="list-style-type: none"> 1. Promote and support healthy lifestyles and wellbeing in the community. 2. Reduce the prevalence of risk factors in the population. 3. Prevent or delay the onset of chronic conditions. 4. Maximise the wellbeing of those living with chronic conditions. 5. Reduce health disparities among different population groups with regard to the conditions and risk factors in the framework. 6. Reduce the gap in life expectancy associated with chronic conditions between Aboriginal and non-Aboriginal people. 7. Increase self-management. 8. Improve collaboration and integration across all sectors.
Principles	<ol style="list-style-type: none"> 1. Addressing the social determinants of health. 2. Demonstrating effective leadership and governance. 3. Working in partnership and collaboration. 4. Encompassing prevention across the continuum of care. 5. Focusing on the early years of life. 6. Addressing services for Aboriginal populations. 7. Promoting respectful and committed person centred care. 8. Addressing social and emotional well-being. 9. Promoting active self-management support. 10. Providing evidence-based care.

¹³ Department of Health and Families, NT Chronic Conditions Prevention and Management Strategy 2010-2020, 2009, <https://health.nt.gov.au/professionals/chronic-conditions-health-professionals/chronic-conditions-prevention-and-management>

¹⁴ Department of Health and Families, NT Chronic Conditions Prevention and Management Strategy 2010-2020, 2009, <https://health.nt.gov.au/professionals/chronic-conditions-health-professionals/chronic-conditions-prevention-and-management>

	<ol style="list-style-type: none"> 11. Promoting integrated multidisciplinary care. 12. Providing care coordination by multidisciplinary teams. 13. Promoting effective organisational and service delivery systems. 14. Demonstrating commitment to monitoring, outcomes and evaluation.
Key action areas	<ol style="list-style-type: none"> 1. Social determinants of health. 2. Primary prevention to prevent and reduce risk factors. 3. Early detection and secondary prevention. 4. Self-management. 5. Care for people with chronic conditions. 6. Workforce planning and development. 7. Information, communication and disease management systems. 8. Continuous quality improvement.

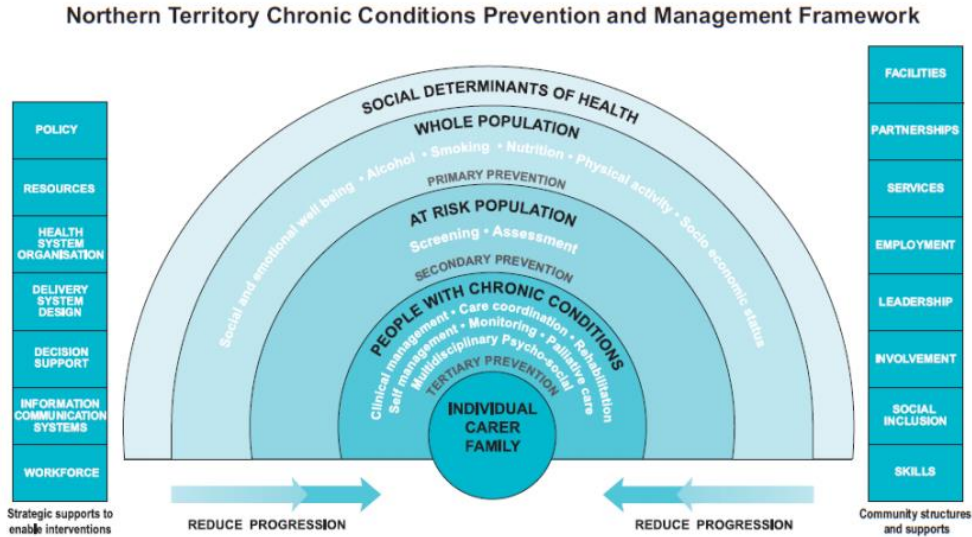
The Strategy’s conceptual framework focuses on strengthening the health system across four components

These four components include:

- individual, carer and family centred care
- community capacity
- strategic supports to enable interventions to be effectively implemented
- interventions across the care continuum, including across the lifespan, across the spectrum of care, across primary, secondary and tertiary health services, and from an individual level to a population level.

These components and the relationships between them are depicted in Figure 3.

Figure 3 | NT Chronic Conditions Prevention and Management Framework



This conceptual framework reflects a targeted population health approach to reducing health inequities. Chronic conditions are experienced at disproportionately high rates by people who are Aboriginal, socio-economically disadvantaged, living in rural and remote communities, and/or prison inmates. While much of the burden of disease associated with chronic conditions could be prevented by addressing individual level modifiable risk factors, community and population level interventions are often needed to achieve the behavioural change this requires. In particular, it is necessary to address the underlying social, economic and other factors that hinder the adoption of healthy behaviours.¹⁵

¹⁵ Department of Health and Families, NT Chronic Conditions Prevention and Management Strategy 2010-2020, 2009, <https://health.nt.gov.au/professionals/chronic-conditions-health-professionals/chronic-conditions-prevention-and-management>

4 Evaluation method

The evaluation was conducted according to a framework that articulated a program logic for the Strategy, quantitative and qualitative indicators, and evaluation questions.¹⁶ The evidence-base for the evaluation included quantitative data, focus groups and interviews, online surveys, case studies, literature and documentation. The Strategy's contribution to the observed outcomes and impact was guided by the evidence-base and the program logic. There were limitations in a number of aspects of the evaluation. Relevant ethical guidelines and frameworks were adhered to. These points are discussed in turn below.

4.1 The evaluation of the Strategy was conducted according to a framework developed by an intersectoral working group

The development of an evaluation framework for the Strategy was led by the Department with support from an intersectoral working group. The group comprised representatives from the Department, TEHS, CAHS, Menzies School of Health Research, NT PHN, AMSANT and other government agencies.

The evaluation framework articulated:

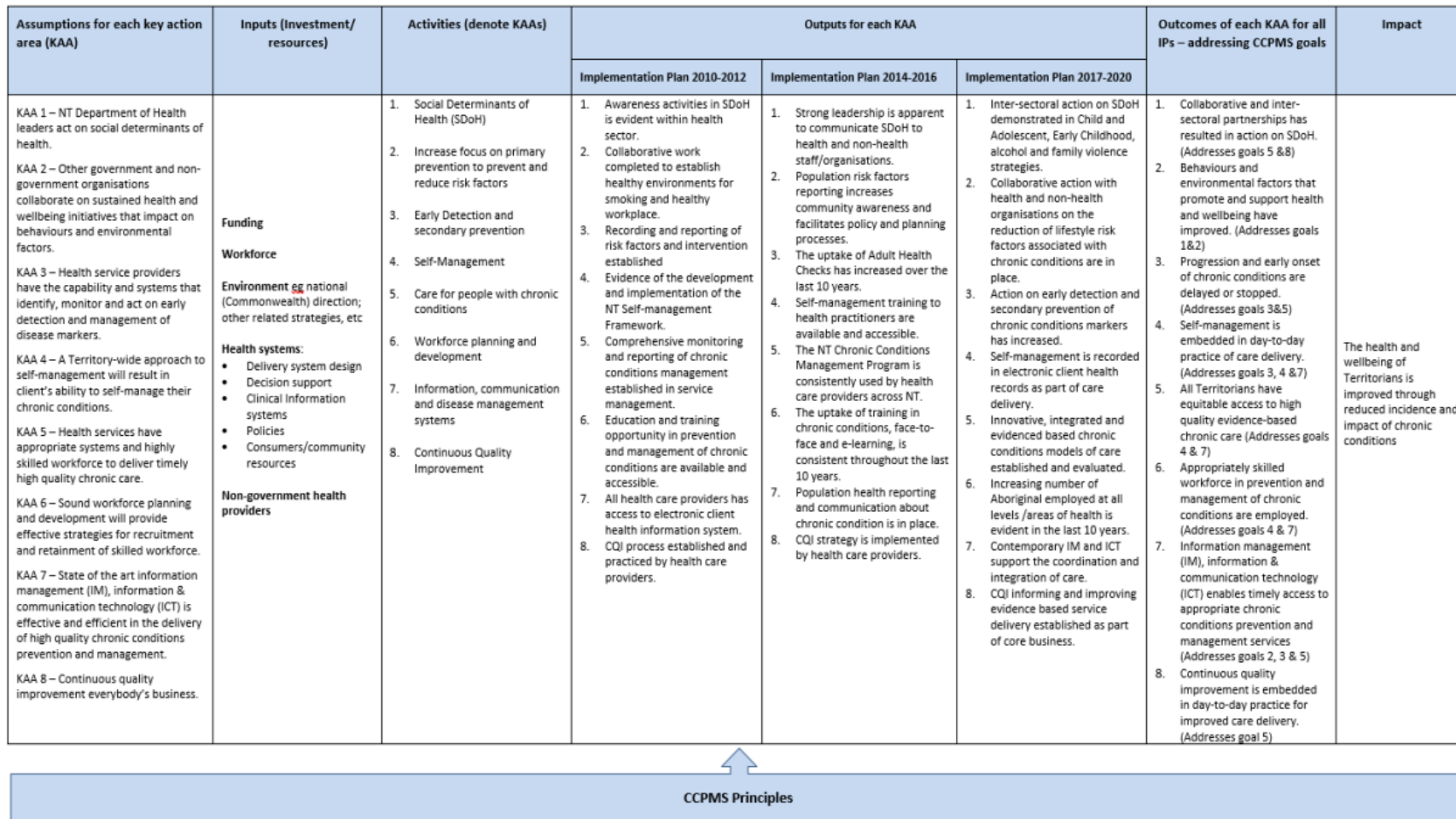
- **A program logic for the Strategy** – The program logic provided a structure to assess the extent to which the Strategy achieved its aim, goals and principles and the intended outcomes of each of its key action areas. It depicts the causal links assumed to exist between the Strategy's assumptions, inputs, activities, outputs, outcomes and impact. It was developed retrospectively due to the lack of an initial evaluation framework or program logic to guide the Strategy's implementation. The program logic is shown in Figure 4.
- **Quantitative and qualitative indicators** – The Strategy was ambitious, spanning many aspects of chronic conditions prevention and management. It included numerous examples of indicators, but many were imprecisely defined, and some were not collected and/or were not reported against. The working group concluded it was unrealistic to measure them all and so specified a smaller set of quantitative indicators from existing and reported sources, and qualitative indicators to be collected through interviews, focus groups and case studies.
- **Evaluation questions** – Nous adapted the evaluation questions into three key lines of enquiry. First, how well has the Strategy been implemented? Second, what impact has the Strategy achieved? Third, how can the Strategy be improved? A full set of lines of enquiry for the evaluation is provided in Appendix B.

The evaluation populated the quantitative and qualitative indicators, and used them along with other evidence to validate the program logic and answer the evaluation questions. Its purpose was to assess the Strategy's implementation and effectiveness and provide a high-level framework to guide the development of its next iteration.

The evaluation was overseen by the Department supported by an Evaluation Advisory Group (EAG).

¹⁶ NT Department of Health, Evaluation Framework for Chronic Conditions Prevention and Management Strategy 2010-2020, 2019.

Figure 4 | Evaluation program logic



4.2 The evidence-base for the evaluation included quantitative data, focus groups and interviews, online surveys, case studies, documentation and literature

Quantitative data analysis

The Department provided data for the quantitative indicators. Statistical analysis was undertaken to measure changes in the indicators since the commencement of the Strategy in 2010 and whether these changes were statistically significant. A more detailed explanation of the method for quantitative analysis is included in Appendix B.

Throughout the report, the data for quantitative indicators is broken down by gender, regions (Top End and Central Australia) and Aboriginal status, where possible. For most indicators, the data could be broken down by two of these dimensions; for some, it could only be broken down by one or none of these dimensions.

The quantitative indicators relating to overarching trends (see Section 6.1) are compared to the most relevant national data that could be obtained.

Focus groups and interviews

Nous conducted focus and interviews groups with 145 people across the NT. This included people from the geographic regions of Alice Springs, Barkly, Darwin, East Arnhem and Katherine. Participants were from government departments, ACCHOs, NGOs and tertiary institutions and included leaders, managers, front line health professionals and others.

Consultation guides were developed to address the quantitative and qualitative indicators, program logic and evaluation questions. Recognising the complexity of the Strategy and that many participants would have limited or no knowledge of it, an 'outcome harvesting' approach was used: participants were asked what changes they had observed over the past ten years and what factors they believed had contributed to them. The factors identified could then be mapped back to the Strategy or other initiatives.

The consultation guides were tested with the Department and the Evaluation Advisory Group. Separate interview guides were developed for senior leaders (such as organisation CEOs) and for managers, front line health professionals and others. These guides are included in Appendix C.

Online surveys

To supplement the focus groups and interviews, an online survey was prepared and made available to stakeholders across the NT. Like the focus groups and interviews, this used an outcome harvesting approach. Participants provided both quantitative and free text responses. The survey received 35 responses, primarily from the Darwin and Alice Springs regions and a mix of leaders, managers and front-line health professionals.

To validate the results of the focus groups, interviews and survey, a further survey was conducted, which received 23 responses.

The instruments for these surveys are included in Appendix D (where they are respectively referred to as the 'main survey' and the 'validation survey'), and their detailed results are presented in Appendix E.

Case studies

The case studies provide rich insights about issues explored in the report. They focus on initiatives from which lessons about chronic conditions prevention and management in the NT can be drawn. For example, they highlight practices that have worked well (or less well) and models that could be replicated by others. While the Strategy has been an important influence on chronic conditions prevention and management in

the NT (as discussed in Section 6.11), the case studies included in this report are not necessarily due to the Strategy.

Documentation

Documentation reviewed included three implementation plans for the Strategy and previous reviews of the Strategy, including the Annual Report 2010, Annual Report 2011, Annual Report 2012-2013 and the mid-term evaluation.

Literature

Related strategies in the NT, Australia and other countries were reviewed. The purpose of this exercise was to identify strategies with which the next strategy may need to align and to understand best practice in chronic conditions prevention and management, while recognising that the NT's unique characteristics means that what works elsewhere may not work in the NT. Other literature, including academic research and policy reports, was used to validate findings from the sources described above.

4.3 The Strategy's impact was assessed using a program logic model

To assess the impact of the Strategy, the evidence described in Section 4.2 above was used to answer the questions shown in Table 3.

Table 3 | Lines of enquiry relating to impact

KEY LINE OF ENQUIRY	SECONDARY LINES OF ENQUIRY	SUB-QUESTIONS
IMPACT <i>What impact has the Strategy achieved?</i>	To what extent were the intended <i>outcomes and impact</i> of the Strategy achieved?	What specific outcomes and overall impact did the Strategy intend to achieve?
		To what extent, where and for whom have these outcomes and impact been achieved?
		Were any positive or negative unintended outcomes achieved?
	To what extent can the outcomes and impact achieved be <i>attributed</i> to the Strategy?	To what extent did the Strategy contribute to the outcomes and impact?
What factors outside of the Strategy may have contributed to the outcomes and impact?		

The question of the extent to which the Strategy contributed to the observed outcomes and impact was addressed by assessing the validity of the contextual assumptions specified in the evaluation framework. The additional contextual assumptions were that:

- The Department is responsible for implementing, monitoring and reporting on the Strategy.
- Government and non-government service providers across the NT use the Strategy as a guide to adopt evidence-based strategies, directions and actions for chronic conditions service delivery.
- Key government and non-government stakeholders are willing and active participants in developing, monitoring and reporting on the Strategy implementation plans.

- The Department and key stakeholders are continually realigning their investments to progress the Strategy.

While this approach to assessing the impact of the Strategy is comprehensive, it is nonetheless difficult to disentangle the Strategy's influence from the many other factors that affected chronic conditions prevention and management in the NT over the past decade. This limitation is discussed further in the following section.

4.4 The evaluation had a number of limitations

The evaluation limitations and the strategies adopted to mitigate them are shown in Table 4.

Table 4 | Evaluation limitations and mitigation strategies

Limitation	Mitigation strategies
<p>Lack of contemporaneous information about implementation – While the Strategy included examples of indicators, there were no agreed performance indicators to monitor its implementation. In addition, due to resource constraints, only three of ten planned annual monitoring reports were developed.</p>	<p>As noted in Section 4.1, the evaluation framework articulated a retrospective program logic and indicators. The Department held an information session about the Strategy with the evaluators and provided supporting documentation.</p> <p>Interviews were conducted with stakeholders involved in the development of the Strategy to understand its context, intent and implementation.</p>
<p>Small number of indicators – While the specification of a smaller set of indicators helped to ensure the feasibility of the evaluation, it also meant that not every aspect of the Strategy and its key action areas has been measured.</p>	<p>Throughout the report, quantitative indicators have been interpreted with care to ensure implications drawn from them are justified, given their limitations. Where possible, quantitative data has been triangulated with other sources of evidence.</p>
<p>Aggregated quantitative data from various sources – The data for the quantitative indicators was gathered from a range of sources. Much of it was aggregated, which reduced the number of data points available for analysis. There was also variation in its coverage of dimensions (for example, Aboriginal status, location, gender) and time periods (for example, 2010-2020). There was also variation in the national data that was available for comparison (for example, in its dimensions or time periods).</p>	<p>A statistical methodology was selected that was appropriate for this type of data (see Appendix B for further details). Nonetheless, due to the small size of the data, quantitative indicators may exhibit changes that are policy relevant but not statistically significant.</p> <p>For most quantitative indicators, the data has been broken down by whichever dimensions were available, and the statistical analysis focuses on changes from 2010 to the most recent year for which data was available.</p> <p>For quantitative indicators relating to overarching trends (for example, see Section 6.1), the data has been compared to the most relevant national data that could be obtained.</p>
<p>Limited availability of stakeholders – The original evaluation plan included four-hour focus groups to allow enough time to discuss all relevant evaluation questions and indicators. Based on advice from the EAG that this would be infeasible for most stakeholders, the four-hour focus groups were replaced with one-hour focus groups and interviews. This likely increased stakeholders' participation in the consultations, but it meant there was less time to elicit their views in detail.</p>	<p>Stakeholders were able to skip questions or topics, or focus on particular ones, if they wished to do so.</p> <p>When it was convenient for stakeholders, focus groups and interviews ran longer than one hour, often up to 90 minutes.</p> <p>The use of a separate interview guide for senior leaders enabled a greater focus with those stakeholders on issues such as governance and the future strategy.</p>

Focus on stakeholders working in NT health system – The primary stakeholders included in the scope for the evaluation (as defined in the Request for Quotation) were all organisations in the NT’s government, non-government and Aboriginal Community Controlled Health sectors. A limited number of non-health organisations, including four NT Government agencies, were included as secondary stakeholders. Direct consultation with private health care providers and consumers was out of scope.

A small number of stakeholders from outside the health sector were interviewed.

Use of a survey to validate consultation themes – Nous and the Department initially intended to test the themes from the consultations through face-to-face workshops in Darwin and Alice Springs. Due to the coronavirus pandemic, this was infeasible.

As noted in Section 4.2, the themes from the consultations were instead validated using a survey. The number of responses for the validation survey was relatively low – there were 23 in total, compared to the 145 participants in the focus groups and interviews, and the 35 responses to the main survey. Most of these responses were from Darwin and Alice Springs; there was only one response from each of Katherine, Nhulunbuy and Tennant Creek. As a result, while the validation survey provided an indication of the theme’s validity, its primary usefulness was in eliciting respondents’ suggestions for improvements (for example, additional data sources to consider).

Inability to individually assess all initiatives under the Strategy – The Strategy’s key action areas and implementation plans included numerous strategies and actions. It was not possible to individually assess each one, the extent to which it was implemented, the outcomes it achieved and how it could be improved.

The evaluation was not intended to individually assess all initiatives under the Strategy, and this is reflected in the evaluation framework. The Department identified what it considered to be the key activities undertaken under the Strategy by its stakeholders. These were activities stakeholders undertook that were consistent with the Strategy and its implementation plans; it was not suggested that all were solely due to the influence of the Strategy. The key activities were then tested with stakeholders during focus groups, interviews and the main survey.

The Strategy’s goals and principles not directly assessed – Stakeholders were not explicitly asked about the goals and principles, due to limited time for discussions. The primary focus was on the key action areas (including the outcomes in the program logic), the quantitative and qualitative indicators and the evaluation questions.

The outcomes outlined in the evaluation program logic were developed to address the goals of the Strategy. For most, if not all of the goals and principles, highly relevant information was collected through the consultations.

Absence of a counterfactual – The Strategy’s impact would ideally be assessed by comparing what did happen over the past decade (i.e. the factual) to a reasonable proxy for what would have happened had it not been implemented (i.e. the counterfactual). No such proxy was available due to the NT-wide nature of the Strategy and the limited comparability of the NT to other jurisdictions. In addition, chronic conditions have complex causes, including long-term genetic and intergenerational influences.¹⁷ As a result, it is possible that observed outcomes reflect changes made prior to the Strategy, and that the Strategy’s impact will take more than ten years to be realised.

The process used to assess the Strategy’s impact attempts to provide the best possible indication of its contribution to the observed outcomes with the evidence available. However, it is nonetheless logically possible that positive outcomes would have been even better, and negative outcomes even worse, in the absence of the Strategy.

¹⁷ Department of Health, Chronic conditions, 2017, <https://www1.health.gov.au/internet/main/publishing.nsf/Content/chronic-disease>

4.5 The evaluation was conducted ethically

At all times during the evaluation, Nous adhered to the National Statement on Ethical Conduct in Human Research, the Australian Evaluation Society's 'Guidelines for the Ethical Conduct of Evaluations', and the Lowitja Institute's 'An Evaluation Framework to Improve Aboriginal and Torres Strait Islander Health'. Human Research Ethics (HRECs) review was not required, as engagement with consumers was out of scope, and consultations were designed and conducted to ensure they presented negligible risk to participants.

5 Implementation of the Strategy

The Strategy provided guidance about implementation, including its intended users, monitoring and evaluation. In practice, implementation evolved over time, for reasons both foreseen (for example, new implementation plans) and unforeseen (for example, resource constraints). At the time of this evaluation, understanding of and engagement with the Strategy varied among its stakeholders, generally being greatest among those in leadership positions and in the government sector. Enablers for the implementation of the Strategy included the Department's commitment of resources, other organisations' support, and the CDNSC. Barriers to implementation included the Strategy's complexity, inconsistent monitoring, insufficient funding and a changing environment. These points are discussed in turn below.

5.1 The Strategy provided guidance about implementation, including its intended users, monitoring and evaluation

The Strategy sought to direct its implementation through the key action areas and more detailed accompanying plans

The intent of the key action areas was "to direct the planning, implementation and evaluation of future services in the prevention and management of conditions in the NT."¹⁸ Each of the eight key action areas included an objective, strategies to achieve the objective, and indicators of performance. An example of a key action area and its associated objective, strategies and indicators is shown in Table 5 below.

Table 5 | Example of key action area and its associated objective, strategies and indicators

Key action area	1. Social determinants of health
Objective	Contribute to improving the social determinants of health impacting on chronic conditions through improving living conditions, food security, education, employment and health literacy.
Strategies	<ul style="list-style-type: none">• Raise awareness of the impact of social determinants of health on chronic conditions and increase capacity to take action.• Provide leadership to strengthen intersectoral collaboration in relation to chronic conditions.• Improve access to health services for all Territorians.• Increase Aboriginal employment in the health sector.
Indicators	<ul style="list-style-type: none">• Health professionals and community members awareness of the impact of social determinants of health on chronic conditions.• Intersectoral action on social determinants of health led by the health sector.• Standard of daily living conditions in remote communities is similar to rural and urban communities.• Access to health services for people in disadvantaged populations.• Level of Aboriginal employment in the health sector.

¹⁸ Department of Health and Families, NT Chronic Conditions Prevention and Management Strategy 2010-2020, 2009, <https://health.nt.gov.au/professionals/chronic-conditions-health-professionals/chronic-conditions-prevention-and-management>

The actions required to achieve the objectives for each key action area were documented in an accompanying implementation plan, which would be updated every three years for the duration of the Strategy. The three successive implementation plans that were developed provided an outline of actions for chronic conditions prevention and management “in government and non-government health organisations, workplaces and communities throughout the NT.”¹⁹

In addition to the relevant actions that could be undertaken, the implementation plans detailed how progress would be checked each year (that is, what was expected to be achieved). They also identified key reference documents for each key action areas including other national, regional and local organisational policies. The annual monitoring reports were then developed to report on the progress made against the proposed achievements.

The implementation plans did not assign the relevant actions to specific organisations. A stakeholder involved in the development of the Strategy reported this was intentional. The idea was that organisations would use the implementation plans “to develop local business plans and to identify opportunities to work collaboratively with others to implement the Strategy.”²⁰

The program logic retrospectively specified five inputs to the Strategy

The five inputs for the Strategy reportedly included:

- funding
- workforce
- environment (for example, related strategies and Australian Government policy directions)
- health systems, including delivery system design, decision support, clinical information systems, consumers and community resources, and policies
- non-government health providers.

These inputs were described at a high level in the Strategy; for example, among the “community structures and supports” and the “strategic supports to enable interventions to be effectively implemented” depicted in its conceptual framework.

Beyond this, the inputs were articulated to varying degrees in the Strategy and implementation plans. The funding and workforce inputs that would be committed were less clearly identified – the Strategy stated they would be reflected in the implementation plans. This does not appear to have been the case, though the third annual monitoring report did detail activities undertaken under each key action area and in some cases the funding associated with them.

Environmental, health system and non-government health provider inputs were more clearly identified (for example, respectively, as related documents, reforms occurring concurrently, or stakeholders involved in implementation).

The Strategy’s intended users were diverse

The users explicitly identified in the Strategy included policy makers, health care providers, public health specialists, government departments, research and education institutions, private companies, NGOs, ACCHOs and consumers. The need for support from the Australian Government and consumer representatives was also noted.

The implementation plans stated that “everyone in the NT...from individuals to government departments” could take part in implementing the Strategy. Against each action in the implementation plans were listed

¹⁹ Department of Health and Families, NT Chronic Conditions Prevention and Management Strategy: Implementation Plan 2010-2020, 2010, <https://clients.nousgroup.com.au/client/DOJ/DOJ01/Shared%20Documents/CCPMS%20Implementation%20Plan%202010-2012.pdf>

²⁰ Department of Health and Families, NT Chronic Conditions Prevention and Management Strategy: Implementation Plan 2010-2020, 2010, <https://clients.nousgroup.com.au/client/DOJ/DOJ01/Shared%20Documents/CCPMS%20Implementation%20Plan%202010-2012.pdf>

the stakeholder groups who could implement them; readers were encouraged to decide which stakeholder group (or groups) they belonged to and see which actions were relevant to them.

The Strategy also recognised the need for a collaborative, whole-of-government approach supported by the not-for-profit and private sectors, particularly to address social determinants. Strategies and actions to achieve this were included in the key action areas and implementation plans.

A communication strategy was developed, outlining how the stakeholders would be informed of the Strategy and engaged in its rollout. Each of the methods of engagement included in the communication strategy, and its target audience and timing, is shown in Table 6.

Table 6 | Communication Strategy (January 2010)

Method	Description	Target audience	Timing
Launch events	Launch events in Darwin, Nhulunbuy, Katherine, Tennant Creek and Alice Springs	All stakeholders	2010
Health professional brochure	Brochure to introduce Strategy and highlight relevant areas	Health professionals	2010
One-page flyer	One-pager for general distribution (for example, through health care centres)	Public	2010
Information pack mailout	Pack containing Strategy, implementation plan and brochure	Health professionals	2010
KPI reports	Regular progress reports on implementation of the Strategy	All stakeholders	Triennially
Dedicated section in the 'The Chronicle'	Use of the Chronic Disease Network's (CDN) quarterly publication, covering implementation and 'good news' stories	Government staff / Health professionals	Quarterly
Combined network meetings	Session related to an aspect of the Strategy at least once per year in each centre	Government staff / Health professionals	Biannually
Annual monitoring reports	Annual reports on progress of implementation of the Strategy	All stakeholders	Yearly
NT conferences	Participation in relevant conferences in the NT by providing speakers, posters, displays and other relevant information	Health professionals / Government staff / Non-Government organisations / NGOs	Ongoing
Professional development forums	Presentations at professional development forums to inform health professionals of the Strategy, the implementation and progress	Health professionals	Ongoing
Electronic media	Use of the internet and other electronic media to distribute information and provide updates to stakeholders (for example, update website)	All stakeholders	Ongoing

The Strategy did not explicitly describe its governance arrangements

The Strategy states it was commissioned by the CDNSC and the NT Preventable Chronic Disease Clinical Reference Group (PCDCRG), which was subsequently consolidated into the CDNSC. The first annual report stated the Department was finalising arrangements for a 'leadership group' for the Strategy.²¹ The second stated the CDNSC would serve as the forum for reporting on the Strategy's implementation.²² In 2013, the CDNSC's terms of reference (TORs) were amended to include the role of governance for implementation.²³

The Strategy included a high-level roadmap for monitoring and evaluation

The proposed monitoring and evaluation arrangements including annual reports, triennial reviews of the implementation plans, and mid-term and final evaluations, the timing of which is shown in Table 7. The Strategy stated the development of an evaluation framework would be detailed in the first implementation plan. Existing indicators and data sources were to be used where possible.

Table 7 | Timing of proposed monitoring and evaluation activities

Financial year	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Annual monitoring reports	[Continuous activity from 2009/10 to 2019/20]										
Implementation plan review			[Activity]			[Activity]			[Activity]		
Evaluation					[Activity]					[Activity]	

5.2 In practice, the Strategy's implementation evolved over time, for reasons both foreseen and unforeseen

The Strategy was staged through three implementation plans

Three successive implementation plans for the Strategy were developed, covering the periods 2010-12, 2014-16 and 2017-20. These were produced by the Department with input from stakeholders across government, research institutions, the Aboriginal health sector and NGOs. The final implementation plan was also informed by:

- national primary health care reforms to reduce avoidable hospitalisations due to chronic conditions (including the Health Care Home model)
- bilateral agreement between the Commonwealth and the Northern Territory for coordinated care reforms to improve patient health outcomes and reduce avoidable demand for health services
- the implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan
- the National Strategic Framework for Chronic conditions
- key findings in the midterm evaluation report.

²¹ NT Department of Health. NT Chronic Conditions Prevention and Management Strategy 2010-2020: Annual Report 2010, Darwin, 2011.

²² NT Department of Health. NT Chronic Conditions Prevention and Management Strategy 2010-2020: Annual Report 2011, Darwin, 2012.

²³ CDNSC TORs, 2013

Key activities the Department identified as being undertaken consistent with the Strategy by its stakeholders are shown in Table 8 below.

Table 8 | Key activities undertaken under the Strategy by its stakeholders

Key action areas	Key activities
1. Social determinants of health	<ul style="list-style-type: none"> Raising health professionals' awareness of social determinants of health and their impact, including through conferences, workshops and forums, and an intersectoral approach to project and program design and implementation.
2. Primary prevention to prevent and reduce risk factors	<ul style="list-style-type: none"> Developing a system to monitor and report on risk factors for chronic conditions. Working toward establish healthy environments, including workplaces. Collaborative action on risk factors for chronic conditions.
3. Early detection and secondary prevention	<ul style="list-style-type: none"> Monitoring and reporting of risk factors for chronic conditions. Increasing action on early prevention and detection markers for chronic conditions.
4. Self-management	<ul style="list-style-type: none"> Providing self-management training to health professionals. Developing and implementing the NT Chronic Conditions Self-Management Framework 2012-2020. Efforts to include an engagement tool in the electronic client health record used in the NT Government health system.
5. Care for people with chronic conditions	<ul style="list-style-type: none"> Efforts to improve coordination and integration of care (for example, between acute and primary care). Monitoring and reporting of chronic conditions management (for example, through traffic light reports and NT AHKPI reports). Establishing chronic conditions networks (for example, Diabetes Network, Cancer Network, Cardiac and Cardiac Rehab Network, Renal Working Group).
6. Workforce planning and development	<ul style="list-style-type: none"> Training for health professionals in chronic conditions prevention and management. An annual diabetes symposium. An annual chronic conditions conference. A quarterly chronic conditions newsletter. Increasing the chronic conditions workforce through Commonwealth-funded positions. Upskilling front line health professionals through the CQI cycle and an annual CQI forum. Increasing the number of Aboriginal staff in the NT Government health system.
7. Information, communication and disease management systems	<ul style="list-style-type: none"> Developing an electronic client health record system including chronic conditions care plans and more recently the NT HealthPathways. Population health reporting and communication on chronic conditions. Supporting coordination of care through contemporary information and communication technologies, including telehealth and My eHealth Record.
8. CQI	<ul style="list-style-type: none"> Supporting the CQI Strategy for Aboriginal Primary Health Care. Establishing a CQI Steering Committee.

At the time of this evaluation, understanding of the Strategy varied among its key stakeholders, but many agreed its conceptual framework was sound

Stakeholders in leadership roles in the Department, TEHS and CAHS generally had a good understanding of the Strategy. It has reportedly informed the Department's strategic plans, TEHS and CAHS' operational plans, and the Department's service delivery agreements with TEHS and CAHS. This is consistent with the assumption in the evaluation framework that stakeholders use the Strategy as a guide to adopt evidence-based strategies, directions and actions.

Stakeholders in leadership roles in other organisations reported lower understanding. Some said there was a lack of clarity about their organisation's roles in the Strategy; for example, due to a lack of information about the initiatives the Strategy included and how their organisations were meant to contribute to them. Consistent with this, some indicated their organisations had not used the Strategy as a guide for their operations. One leader stated the Strategy was an influence on their sector but not the main driver.

Many stakeholders in other roles, such as front-line health professionals and middle managers, stated they had not heard of the Strategy or had not read it (at all or for a number of years); for example, because it was one of many strategies relevant to their roles. They were nevertheless reasonably aware of most of the key activities shown in Table 8, particularly in relation to key action areas 6, 7 and 8, followed by key action areas 3 and 5.

However, while stakeholders varied in their understanding and awareness of the Strategy, most agreed the key action areas in the Strategy are still relevant and provide a good framework for chronic conditions prevention and management in the NT. Almost all agreed there should continue to be a strategy. Some called for greater emphasis on particular areas, such as social determinants and social and emotional wellbeing.

In slight contrast, the mid-term evaluation found that the Strategy "facilitates a clear, shared vision to reduce the incidence and impact of chronic conditions, and receives near universal health sector support."²⁴ This more positive finding may reflect the Strategy's long duration, lessening the understanding and engagement over time (for example, as a result of staff turnover and the Department's limited capacity for ongoing investment in awareness raising activities).

Most activities within the communication strategy were undertaken as planned

The evidence from documentation and consultations suggest that the Strategy was for the most part communicated consistently with the communication strategy (as described in Table 6). Some exceptions to this included the triennial KPI reports and the biannual combined network meetings. The Chronicle covering good news stories on the Strategy ceased in 2014-15 and the annual monitoring reports for the Strategy ceased after three years, as noted elsewhere in the report. Some activities intended to be ongoing were implemented inconsistently due to resource constraints.

Activities undertaken in addition to those in the communication strategy included a ministerial launch and a specific brochure for other government departments to create awareness and foster relationships.²⁵ The Strategy was also featured in the Department's annual reports.

The CDNSC primarily performs advisory and information sharing functions

Membership of the committee includes representatives from the Department, TEHS, CAHS, Menzies School of Health Research, NT PHN, AMSANT and NGOs.^{26 27}

²⁴ Menzies School of Health Research, Mid-term evaluation: Chronic Conditions Prevention and Management Strategy 2010-2020, 2016.

²⁵ NT Department of Health. NT Chronic Conditions Prevention and Management Strategy 2010-2020: Annual Report 2010, Darwin, 2011.

²⁶ NT Department of Health, Evaluation Framework for Chronic Conditions Prevention and Management Strategy 2010-2020, 2019.

²⁷ RFQ

As noted in Section 5.2, the CDNSC's TORs were amended in 2013 to include the role of governance for implementation of the Strategy.²⁸ They were subsequently amended in 2018 to include the role of promoting widespread adoption of the Strategy.²⁹

The CDNSC can also create time-limited working groups for specific purposes, and it did so early in the life of the Strategy, including for social determinants of health and prevention, early detection and management, self-management, and monitoring and evaluation. The monitoring and evaluation working group was responsible for the development of the annual monitoring reports and the evaluation framework for this evaluation.

Consultation with CDNSC members highlighted that they do not view it as a governance body, as all the funding, authority and delegations rest with the Department. Instead, they view it as an advisory body to the Department. This may have contributed to the more variable engagement with the Strategy of stakeholders outside government.

CDNSC members also clarified that, while the original intention was to report to the Department's Executive and through it to the Minister, this has not taken place (with the exception of the annual monitoring reports). They identified a need to strengthen the Executive's oversight of the committee (for example, by having it endorse the committee's priorities, which would improve their legitimacy).

CDNSC members also identified other functions of the committee that they consider valuable, including:

- providing a forum for information sharing and collaboration between organisations and sectors, particularly between the government and non-government sectors
- giving non-government stakeholders an opportunity to understand and influence the Department's policy efforts (and, conversely, giving the Department an opportunity to efficiently obtain this input)
- enabling coordination and reducing duplication across organisations and sectors
- communicating and operationalising strategic priorities
- improving members' understanding of the Strategy.

The Department, supported by CDNSC members, sought to improve the effectiveness of the CDNSC over time. For example, the amendment to the CDNSC's TORs in 2018 sought to prioritise focus areas (namely social determinants, health literacy and monitoring and evaluation). However, these efforts were reportedly not followed through.

Planned evaluations of the Strategy and reviews of its implementation plans were conducted, however there were shortfalls in its monitoring

Ongoing monitoring of the Strategy occurred until 2013; only three of the planned annual monitoring reports were developed, as insufficient resourcing was available to continue them beyond this. While the Strategy included examples of indicators, they were not reported against, and there were no agreed indicators for implementation (as noted in Section 5.1). The implementation plans were reviewed and updated twice. Both mid-term and final evaluations were undertaken.

While the Strategy stated the development of an evaluation framework would be detailed in the first implementation plan (as noted in Section 5.1), an evaluation framework was instead developed to inform the final evaluation (as noted in Section 4). It drew on existing indicators and data sources where possible.

The timing of the monitoring and evaluation of the Strategy is shown in Table 9.

²⁸ CDNSC TORs, 2013

²⁹ CNSC TORs, 2018

Table 9 | Timing of actual monitoring and evaluation activities

Financial year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Annual monitoring reports		■	■	■							
Implementation plan review					■			■			
Evaluation							■				■

5.3 There were a number of enablers of and barriers to implementation

Consultation with the Department and its stakeholders highlighted a number of enablers of and barriers to the implementation of the Strategy. Enablers for implementation included:

- **The Department’s commitment of resources** – These resources included one full-time-equivalent staff-member and a travel budget for promotion; however, these resources were modest given the ambitious nature of the Strategy, and some stakeholders believed they were insufficient. Similarly, two full-time equivalent (FTE) staff-members and a travel budget supported the promotion of the Strategy via the production of newsletters and the annual Chronic Disease Network conference; however, staff turn-over has made it challenging to fulfil this secretariat function.
- **Stakeholder’s goodwill and support** – Beyond the Department’s commitment of resources, there was no dedicated funding for the Strategy. The Strategy’s stakeholders progressed the Strategy’s initiatives using their own budgets and workforce.
- **The CDNSC** – In addition to providing a forum for information sharing and collaboration between sectors, the committee reportedly drove monitoring and evaluation of the Strategy (for example, by overseeing the development of the evaluation framework and the three annual monitoring reports). Its effectiveness was aided by members’ willingness to commit their time, their contact with the grassroots in their organisations and sectors, and their involvement with other forums.

Barriers to implementation included:

- **Inconsistent monitoring** – While the implementation plans described at a high level how progress would be checked each year (as noted in Section 5.1), the lack of agreed indicators for implementation (as noted in Section 5.2) has made it difficult to assess the extent to which progress has been achieved and has been attributable to the Strategy.
- **A changing environment** – Major reforms in health and health service delivery took place over the life of the Strategy, such as the introduction of PHNs, reform of primary health care through initiatives such as Health Care Home, and the negotiation of the National Health Reform Agreement and subsequent establishment of the Department, TEHS and CAHS as three separate entities. While these reforms did not negate the relevance of the Strategy, they may have drawn resources and/or attention away from it.
- **The complexity of the Strategy** – The clarity and accessibility of the Strategy was reportedly reduced by its inclusion of numerous components (for example, goals, objectives, principles, key action areas, sub-strategies, example indicators and a conceptual framework). There was also overlap between many of the components (for example, the goals, principles and key action areas), which suggests they could have been consolidated or defined more narrowly. While each component served a purpose (for

example, the goals were for the overall Strategy and the objectives were for individual key action areas), it was nonetheless complex. Another source of complexity was the diversity of the Strategy's intended users, which included government, non-government, Aboriginal Community Controlled and private organisations, as well as consumers (as noted in Section 5.1).

- **The lack of funding and complexity of funding arrangements** – A common theme in consultations was a lack of funding for chronic conditions prevention and management in the NT, including for particular services (such as telehealth). Another theme was the complexity of funding arrangements, which encompass many different sources at both the NT and national levels. The initiatives funded from these sources are reportedly insufficiently uncoordinated, leading to gaps, overlaps and a reduction in their collective impact. These issues are discussed in Section 7.2.

6 Impact of the Strategy

This section focuses on the impact of the Strategy.

Section 6.1 assesses progress against the Strategy's overall aim.

Sections 6.2 through 6.9 assess performance in each of the Strategy's key action areas, including in regard to the outputs, outcomes and assumptions in the program logic.

Section 6.10 assesses the extent to which the Strategy's goals were achieved and its principles were reflected in practice.

Section 6.11 considers the extent to which the observed changes can be attributed to the Strategy as opposed to other factors.

6.1 Overarching trends

The overall aim of the Strategy was "to improve the health and wellbeing of all Territorians by reducing the incidence and impact of chronic conditions." Table 10 lists the indicators included in the evaluation framework to assess progress against this aim and how they were measured for this report. Analysis of these indicators along with other data and literature has provided the evidence base for this section.

Table 10 | Evaluation indicators for overarching trends

Indicator name	Measure used	Type
Low birthweight	Proportion of babies born with low birthweight	Quantitative
Life expectancy	Estimated life expectancy at birth	Quantitative
Mortality due to chronic conditions	Age-standardised rate of mortality due to chronic conditions (including by chronic condition group)	Quantitative
Morbidity due to chronic conditions	Age-standardised rate of years lived with disability (including by chronic condition group)	Quantitative
Potentially preventable hospitalisations due to chronic conditions	Rate of potentially preventable hospitalisations due to chronic conditions Rate of all hospitalisations due to chronic conditions (including by chronic condition group)	Quantitative

The findings for each indicator are summarised in Table 11 below.

Table 11 | Findings regarding overarching indicators

Indicator	Findings
Low birthweight	<ul style="list-style-type: none"> From 2010 to 2017, there was no statistically significant change in the proportion of low birthweight babies. This was consistent with national trends, in which the proportion of low birthweight babies (overall and for Aboriginal and Torres Strait Islander mothers) was stable from 2006 to 2017.
Life expectancy	<ul style="list-style-type: none"> From 2010 to 2017, there was a statistically significant increase in life expectancy for non-Aboriginal men and women. There was also a large increase for Aboriginal men, and a small increase for Aboriginal women, but these were not statistically significant.

	<ul style="list-style-type: none"> Relative to national trends, life expectancy has improved in the NT for most population groups. Given that chronic conditions are a leading cause of death for both Aboriginal and non-Aboriginal people in the NT, this improvement is likely due at least in part to better chronic conditions prevention and management.
Mortality due to chronic conditions	<ul style="list-style-type: none"> From 2010 to 2016, the age-standardised mortality rate due to chronic conditions decreased among men and increased among women, but these changes were not statistically significant. National-level data for this indicator against which to compare the NT trends was unavailable. Condition-by-condition data on this indicator was volatile, which limited the conclusions that could be drawn.
Morbidity due to chronic conditions	<ul style="list-style-type: none"> From 1999 to 2013, there was a statistically significant increase in the age-standardised rate of total years lived with disability (due to all conditions) for both Aboriginal and non-Aboriginal people in Central Australia. There was also an increase for non-Aboriginal people in the Top End, and a decrease for Aboriginal people in the Top End, but these were not statistically significant. In comparison, the age-standardised rate of total years lived with disability nationally was stable from 2003 to 2015. For both Aboriginal and non-Aboriginal people, there were statistically significant increases in the age-standardised rates of total years lived with disability due to infectious diseases and unintentional injuries. For Aboriginal people, there was also a statistically significant increase for mental and substance use disorders and a statistically significant decrease for respiratory diseases. For non-Aboriginal people, there was also a statistically significant decrease for reproductive and maternal conditions.
Potentially preventable hospitalisations due to chronic conditions	<ul style="list-style-type: none"> From 2012-13 to 2017-18, rates of potentially preventable hospitalisations due to chronic conditions remained higher in the NT than nationally. From 2010 to 2018, there were significant increases in the rate of all hospitalisations due to chronic conditions for Aboriginal men, Aboriginal women, non-Aboriginal men and non-Aboriginal women. Over this same period, for all population groups (including Aboriginal and non-Aboriginal men and women), there were statistically significant increases in the rates of all hospitalisations due to COPD, diabetes, and depression and anxiety; there were also decreases in the rate of all hospitalisations due to renal failure, but these were not statistically significant.

6.1.1 There was no statistically significant change in the proportion of low birthweight babies

Babies born with low birthweight (less than 2,500 grams) have increased risk of developing chronic conditions such as diabetes and cardiovascular disease later in life.³⁰ As a result, the improved survival rate of babies born with low birthweight since the 1960s partly explains the current epidemic of chronic conditions among Aboriginal people.³¹ Lower infant and child death rates are also associated with higher life expectancy.³²

³⁰ AIHW, Children's Headline Indicators, updated 18 Sept 2018

<https://www.aihw.gov.au/reports/children-youth/childrens-headline-indicators/contents/3-low-birthweight>

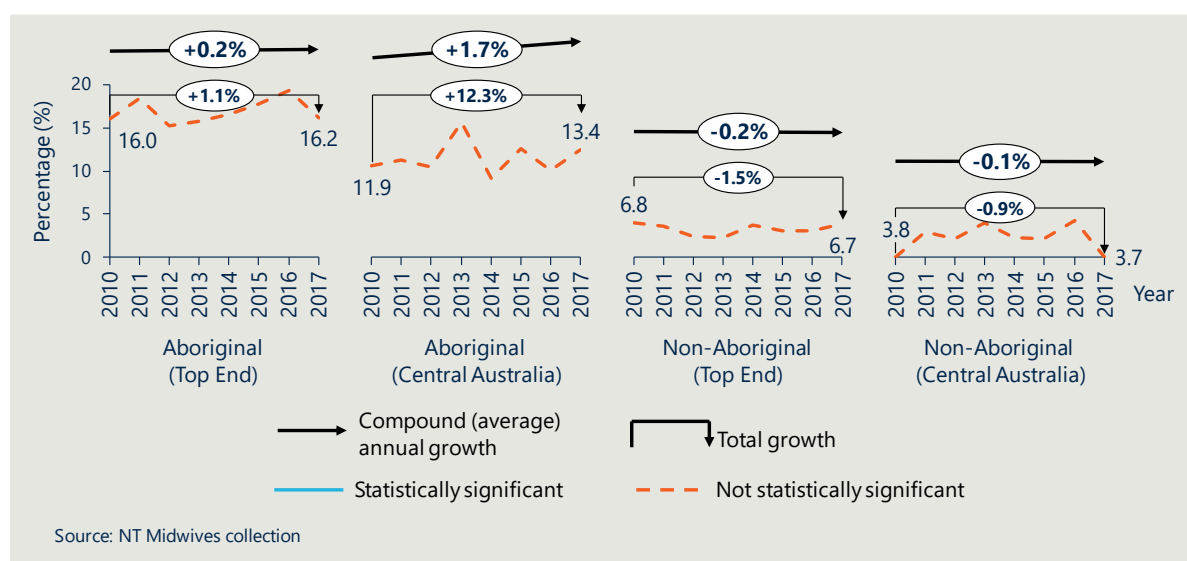
³¹ Hoy, WE & Nicol, JL, The Barker hypothesis confirmed: association of low birth weight with all-cause natural deaths in young adult life in a remote Australian Aboriginal community, *Journal of Developmental Origins of Health and Disease*, 2019.

³² AIHW, Life expectancy & deaths: about, <https://www.aihw.gov.au/reports-data/health-conditions-disability-deaths/life-expectancy-deaths/about>

From 2010 to 2017, there was no statistically significant change in the proportion of babies born with low birthweight in the NT, as shown in Figure 5. The indicator fluctuated among all population groups (Aboriginal and non-Aboriginal people in the Top End and Central Australia).

This is consistent with national trends. From 2006 to 2017, the proportion of low birthweight babies nationally was stable, ranging from 6.1 per cent to 6.7 per cent. Over this same period, the proportion of low birthweight babies born to Aboriginal and Torres Strait Islander mothers was also stable, ranging from 12.4 per cent to 12.5 per cent.³³

Figure 5 | Percentage of babies with low birthweight, by mother's Aboriginal status and health service, 2010-2017, NT³⁴



6.1.2 Life expectancy increased for non-Aboriginal people

Life expectancy is a commonly used measure of the overall health of a population. It can help express the differences and changes in population groups' health for the purposes of evaluation, planning and policy-making.³⁵

Between 1967 and 2012, life expectancy increased for Aboriginal people in the NT and for all Australians.³⁶ The Department of Health's 2013 report on *The health and wellbeing of older Territorians* discussed the health service implications for the ageing population, which need to be considered to optimise the provision of health services across the continuum of care for people with chronic conditions.³⁷ The physiological decline that accompanies ageing is characterised by changes in disease and injury patterns,

³³ AIHW, Life expectancy & deaths: <https://www.aihw.gov.au/reports-data/health-conditions-disability-deaths/life-expectancy-deaths/about>

³⁴ AIHW, National Key Performance Indicators for Aboriginal and Torres Strait Islander Primary Health Care: Results to June 2018. Note: Babies' birthweight 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 of this data.

³⁵ AIHW, Life expectancy and deaths, accessed 18 March 2020, updated 7 June 2019 <https://www.aihw.gov.au/reports-data/health-conditions-disability-deaths/life-expectancy-deaths/overview>

³⁶ Georges, N, et al., Progress in closing the gap in life expectancy at birth for Aboriginal people in the Northern Territory 1967-2012, Medical Journal of Australia, 2017.

³⁷ McConville V, Dempsey K, Tew K, Malyon R, Thompson F, Guthridge S, Bhatia B. The health and wellbeing of older Territorians. Department of Health: Darwin, 2013

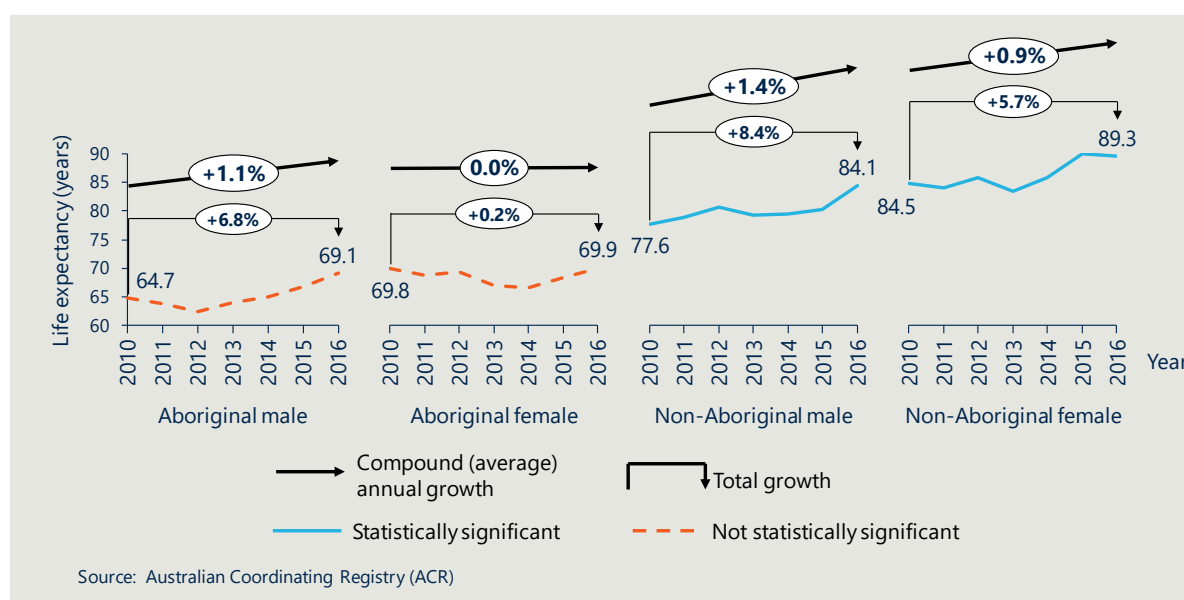
including an increase in comorbidities, and increasing use of both health and non-health services. This increases the need for coordinated and multidisciplinary care at the individual and population levels.

Despite the increase in life expectancy, the Closing the Gap target of eliminating the national gap in life expectancy between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians by 2031 is not on track to be achieved.³⁸

In the NT from 2010 to 2016 (Figure 6) shows:

- There was a statistically significant increase in life expectancy among non-Aboriginal men (of around 8 per cent, from 77.6 to 84.1 years) and non-Aboriginal women (of around 6 per cent, from 84.5 to 89.3 years).
- There was an increase in life expectancy for Aboriginal men (of around 7 per cent, from 64.7 to 69.1 years), but this was not statistically significant.
- There was a small increase in life expectancy for Aboriginal women (of less than 1 per cent, from 69.8 years to 69.9 years), but this was not statistically significant.

Figure 6 | Life expectancy, by Aboriginal status and gender, 2010-2016, NT

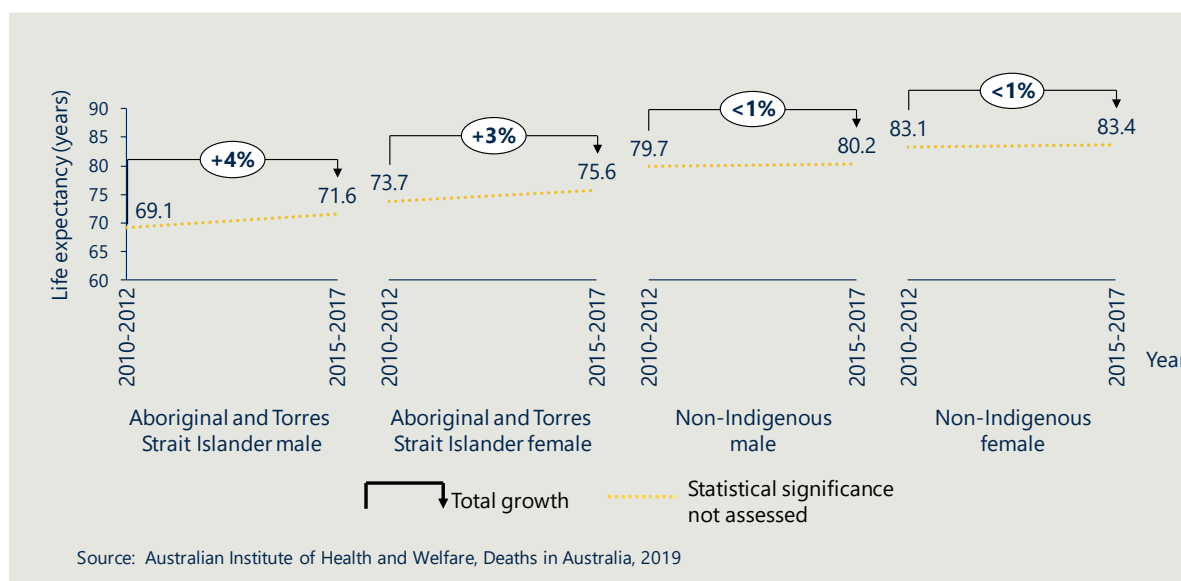


In comparison, nationally from 2010-2012 to 2015-2017 (as shown in Figure 7):

- There was a 4 per cent increase in life expectancy for Aboriginal and Torres Strait Islander men (from 69.1 to 71.6 years) and a 3 per cent increase for Aboriginal and Torres Strait Islander women (from 73.7 to 75.6 years).
- There was a less than 1 per cent increase in life expectancy for both non-Indigenous men (from 79.7 to 80.2 years) and non-Indigenous women (from 83.1 to 83.4 years).

³⁸ Wilson, T, Zhao, Y, and Condon, J, Limited progress in closing the mortality gap for Aboriginal and Torres Strait Islander Australians of the Northern Territory, Australian and New Zealand Journal of Public Health, 2019.

Figure 7 | Life expectancy, by Aboriginal status and gender, 2010-2012 to 2016-2018, Australia



This suggests that life expectancy has improved in the NT relative to national benchmarks for non-Indigenous men and women and, to a lesser extent, Aboriginal men. It is likely this is due in part to improvement in chronic conditions prevention and management. Chronic conditions are a leading cause of death in the NT for both Aboriginal and non-Aboriginal people.³⁹ For Aboriginal and Torres Strait Islander Australians, reductions in risk factors such as smoking, and improvements in early detection and management of chronic conditions, have been identified as drivers of improvement in health outcomes impacting on life expectancy.⁴⁰

6.1.3 Mortality due to chronic conditions decreased among men while increasing among women

The evaluation framework included mortality due to chronic conditions as an indicator of overall health status and improvement over time.⁴¹

Overall, mortality due to chronic conditions decreased among men and increased among women, but these changes were not statistically significant

From 2010 to 2016, there was a decrease in the age-standardised mortality rate due to chronic conditions among both Aboriginal and non-Aboriginal men (as shown in Figure 8):

- For Aboriginal men there was a 7.2 per cent reduction in mortality rate (from 1,199 to 1,114 per 100,000 population).
- For non-Aboriginal men there was a 14.5 per cent reduction in mortality rate (from 477 to 408 per 100,000 population).

In contrast, there were increases in the mortality rate due to chronic conditions among Aboriginal and non-Aboriginal women:

³⁹ Australian Bureau of Statistics, Causes of Death, Northern Territory, 2018, 2019,

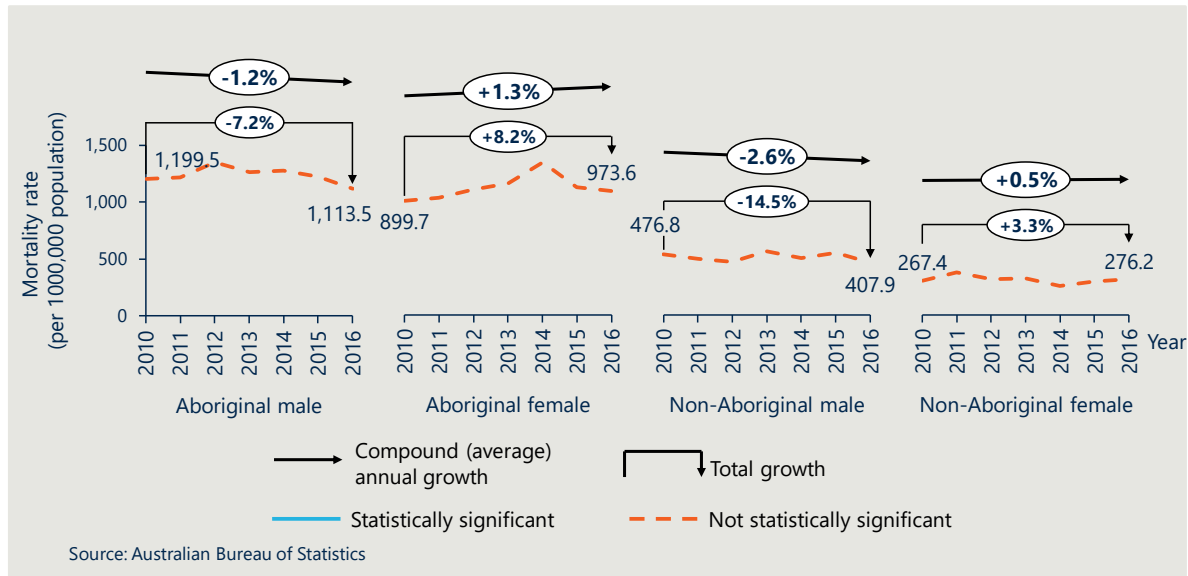
⁴⁰ National Indigenous Australians Agency, Closing the Gap Report 2020, <https://ctgreport.niaa.gov.au/life-expectancy>, <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2018~Main%20Features~Australia's%20leading%20causes%20of%20death.%202018~1>

⁴¹ NT Department of Health, Evaluation Framework for Chronic Conditions Prevention and Management Strategy 2010-2020, 2019.

- For Aboriginal women there was an 8.2 per cent increase in mortality rate (from 900 to 974 per 100,000 population).
- For non-Aboriginal women there was a 3.3 per cent increase in mortality rate (from 267 to 276 per 100,000 population).

None of these changes was statistically significant, and the indicator fluctuated among all population groups (Aboriginal and non-Aboriginal men and women).

Figure 8 | Age-adjusted mortality rate due to all chronic conditions, by Aboriginal status and gender, 2010-2016, NT



National-level data on mortality due to chronic conditions against which to compare the NT trends was unavailable. However, for comparison, data on mortality due to all conditions (not just chronic conditions) shows that:

- From 2006 to 2018, the age-standardised mortality rate for Aboriginal and Torres Strait Islander people across Australia fell by almost 10 per cent, while that for Aboriginal and Torres Strait Islander people in the NT showed little or no improvement.⁴²
- From 2003 to 2015, the age-standardised rate of years of life lost (YLL) across Australia fell by 20 per cent (from 111 to 89 YLL per 1,000 population).⁴³
- In 2015, the age-standardised rate of YLL in the NT was 78 per cent higher than the Australian average (159 compared to 89 YLL per 1,000 population).⁴⁴

⁴² National Indigenous Australians Agency, Closing the Gap Report 2020, <https://ctgreport.niaa.gov.au/life-expectancy>, <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2018~Main%20Features~Australia's%20leading%20causes%20of%20death,%202018~1>

⁴³ Australian Institute of Health and Welfare, Australian Burden of Disease Study: Impact and causes of illness and death in Australia, 2015.

⁴⁴ Australian Institute of Health and Welfare, Australian Burden of Disease Study: Impact and causes of illness and death in Australia, 2015.

Condition-by-condition data on mortality due to chronic conditions was volatile from year-to-year

Jurisdictional mortality data is volatile from year to year.⁴⁵ Condition-specific mortality data could be expected to be particularly volatile, especially in the NT due to its small population. Consistent with this (as shown in Figure 9):

- For all groups, there was proportionally large decreases in the age-adjusted mortality rate for some conditions and proportionally large increases for others.
- Each population group differed in the chronic conditions for which there had been increases or decreases.
- Relatively few of the observed changes were statistically significant.

More detailed data on the mortality rate for each chronic condition is included in Appendix B.

⁴⁵ National Indigenous Australians Agency, Closing the Gap Report 2020, <https://ctgreport.niaa.gov.au/life-expectancy>, <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2018~Main%20Features~Australia's%20leading%20causes%20of%20death,%202018~1>

Figure 9 | Change in age-adjusted mortality rate due to specified chronic conditions from 2010-2016, by Aboriginal status and gender, NT



6.1.4 Morbidity due to chronic conditions increased for people in Central Australia

The evaluation framework included morbidity due to chronic conditions as an indicator of the non-fatal burden of disease arising from chronic conditions and the contribution to the overall health cost.⁴⁶ The data used for this indicator is the age-standardised rate of total years lived with disability (not only years

⁴⁶ NT Department of Health, Evaluation Framework for Chronic Conditions Prevention and management Strategy 2010-2020, 2019.

lived with disability due to chronic conditions). This data, while relevant to chronic conditions prevention and management in the NT, is less relevant to the Strategy itself, as it only covers its first three years.

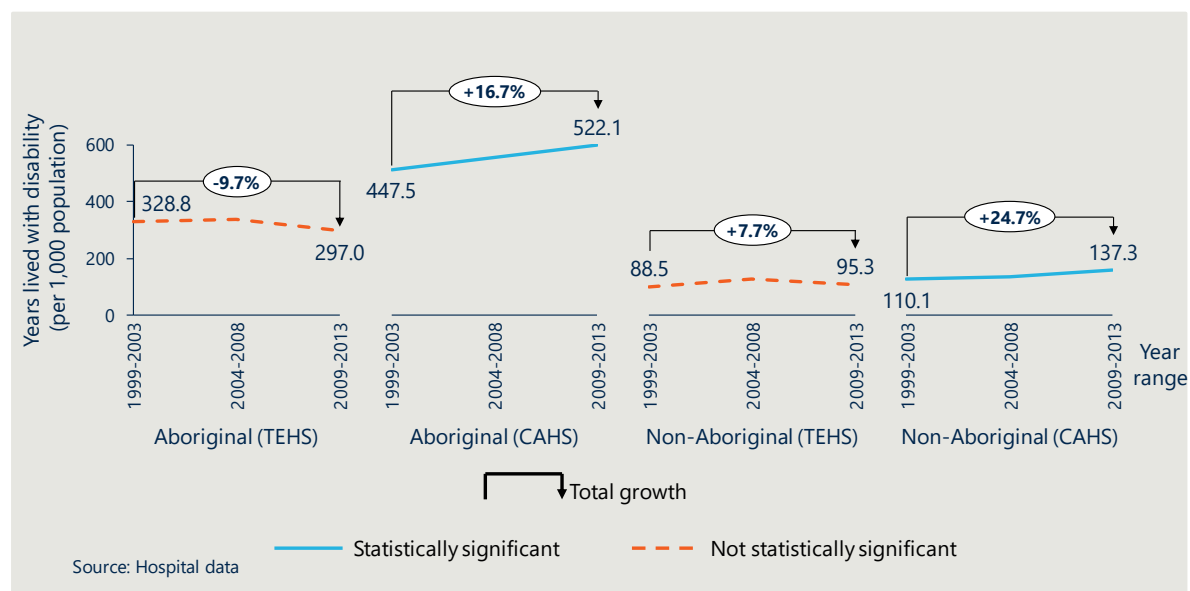
The rate of total years lived with disability increased relative to national benchmarks

From 1999 to 2013, there was a statistically significant increase in the age-standardised rate of total years lived with disability for both Aboriginal and non-Aboriginal people in Central Australia (as shown in Figure 10):

- For Aboriginal people there was a 16.7 per cent increase in total years lived with disability (from 448 to 522 per 1,000 population).
- For non-Aboriginal people there was a 24.7 per cent increase in total years lived with disability (from 110 to 137 per 1,000 population).

There was also a 7.7 per cent increase in total years lived with disability for non-Aboriginal people in the Top End (from 88 to 95 per 1,000 population), and a 9.7 per cent decrease in total years lived with disability for Aboriginal people in the Top End (from 329 to 297 per 1,000 population), but these changes were not statistically significant.

Figure 10 | Age-standardised rate of total years lived with disability, by Aboriginal status and health service, 1999-2013, NT



In comparison, over a similar period, the age-standardised rate of total years lived with disability nationally was stable, declining from 97 in 2003 to 95 in 2015. Data on years lived with disability broken down by Aboriginal status was unavailable.⁴⁷ This suggests that morbidity due to chronic conditions has increased in the NT relative to national benchmarks.

There were statistically significant increases in the rate of total years lived with disability due to infectious diseases and unintentional injuries for both Aboriginal and non-Aboriginal people

Condition-specific data shows that from 1999 to 2013 (as shown in Figure 11):

- For Aboriginal people in the NT, there were statistically significant increases in the age-standardised rate of years lived with disability due to mental and substance use disorders (of 6.2 years lived with disability, or 22 per cent), infectious diseases (of 8.8 years lived with disability, or 22 per cent) and

⁴⁷ Australian Institute of Health and Welfare, Australian Burden of Disease Study: impact and causes of illness and death in Australia, 2015, <https://www.aihw.gov.au/getmedia/c076f42f-61ea-4348-9c0a-d996353e838f/aihw-bod-22.pdf.aspx?inline=true>

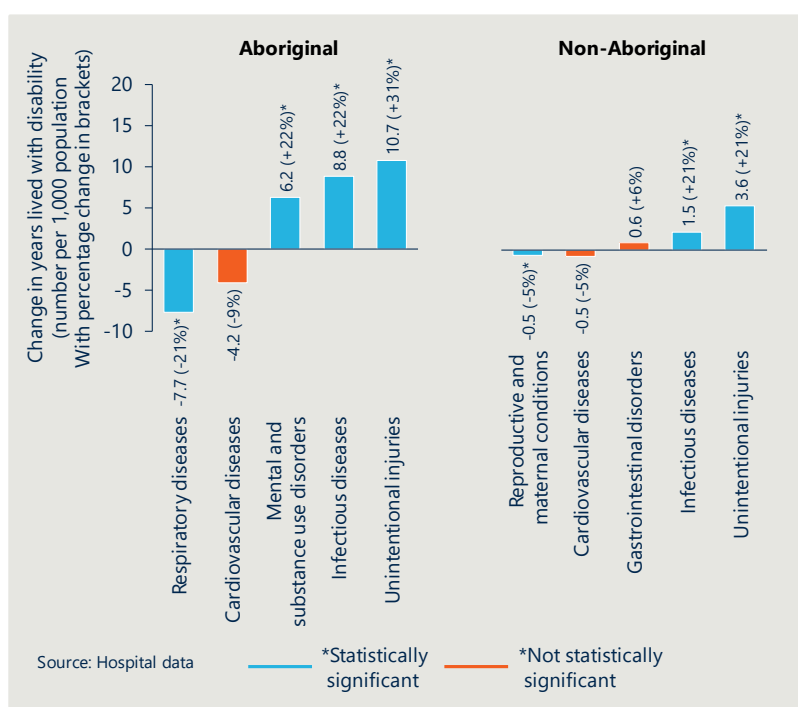
unintentional injuries (of 10.7 years lived with disability, or 31 per cent). There was also a statistically significant decrease in the age-standardised rate of years lived with disability due to respiratory diseases (of 7.7 years lived with disability, or 9 per cent).

- For non-Aboriginal people in the NT, there were statistically significant increases in the age-standardised rate of years lived with disability due to infectious diseases (of 1.5 years lived with disability, or 21 per cent) and unintentional injuries (of 3.6 years lived with disability, or 21 per cent). There was also a statistically significant decrease in the age-standardised rate of years lived with disability due to reproductive and maternal conditions (of 0.5 years lived with disability, or 5 per cent).

For each population group (Aboriginal and non-Aboriginal people), this data was limited to the top five disease systems (ranked by their contribution to years lived with disability).

More detailed data on the rate of years lived with disability for each condition is included in Appendix B.

Figure 11 | Change in age-standardised rate of total years lived with a disability by top 5 disease groups (ranked by their contribution to years lived with disability) from 1999-2013, by Aboriginal status, NT



6.1.5 Changes in potentially preventable hospitalisations due to chronic conditions differed between the Top End and Central Australia

Potentially preventable hospitalisations are “hospital admissions that potentially could have been prevented by timely and adequate health care in the community”.⁴⁸ The potentially preventable hospitalisations indicator provides a proxy for primary health care effectiveness. It is an accessible source of insights because hospitalisation data is routinely collected and widely available.⁴⁹

⁴⁸ AIHW, Potentially preventable hospitalisations in Australia by age groups and small geographic areas, 2017–18, updated on 14 Nov 2019 <https://www.aihw.gov.au/reports/primary-health-care/potentially-preventable-hospitalisations/contents/overview>

⁴⁹ Australian Commission on Safety and Quality in Health Care, A guide to the potentially preventable hospitalisations indicator in Australia, 2017, <https://www.safetyandquality.gov.au/sites/default/files/migrated/A-guide-to-the-potentially-preventable-hospitalisations-indicator-in-Australia.pdf>

It also has several limitations. It does not capture all hospitalisations that could have been prevented. Conversely, not all hospitalisations captured might have been prevented. It is also influenced by factors other than primary health care effectiveness, such as the social determinants of health.

Rates of potentially preventable hospitalisations due to chronic conditions remained higher in the NT than nationally

From 2012-13 to 2017-18, rates of potentially preventable hospitalisations due to chronic conditions remained higher in the NT than nationally. Over this period:

- The age-standardised rate of potentially preventable hospitalisations due to chronic conditions increased by 3 per cent for Aboriginal people in the NT (from 5,202 to 5,336 per 100,000 people). In comparison, the rate for Aboriginal and Torres Strait Islander Australians increased by 13 per cent (from 3,373 to 3,796 per 100,000 people).⁵⁰
- The age-standardised rate of potentially preventable hospitalisations due to chronic conditions increased by less than 1 per cent for non-Aboriginal people in the NT (from 1,229 to 1,234 per 100,000 people). In comparison, the rate for non-Indigenous Australians increased by 8 per cent (from 1,092 to 1,181 per 100,000 people).⁵¹

Rates of potentially preventable hospitalisations due to chronic conditions remained lower in the Top End than in Central Australia

From 2010 to 2018 (as shown in Figure 12):

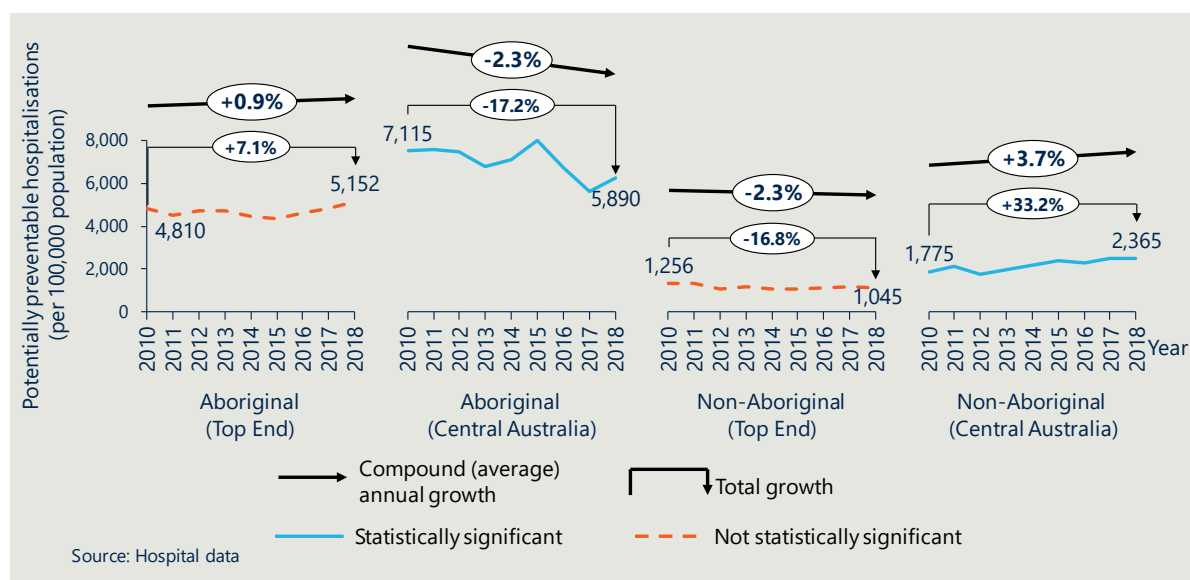
- There was an increase in the rate of potentially preventable hospitalisations due to chronic conditions for Aboriginal people in the Top End (from 4,810 to 5,182 per 100,000 population) but a decrease for those in Central Australia (from 7,115 to 5,890 per 100,00 population).
- There was a decrease in the rate of potentially preventable hospitalisations due to chronic conditions for non-Aboriginal people in the Top End (from 1,256 to 1,045 per 100,000 population) but an increase for those in Central Australia (from 1,775 to 2,365 per 100,00 population).

Only the changes in Central Australia were statistically significant.

⁵⁰ NT hospital data; Australian Institute of Health and Welfare, Disparities in potentially preventable hospitalisations across Australia, 2012-13 to 2017-18, 2020, <https://www.aihw.gov.au/reports/primary-health-care/disparities-in-potentially-preventable-hospitalisations-australia/data>

⁵¹ NT hospital data; Australian Institute of Health and Welfare, Disparities in potentially preventable hospitalisations across Australia, 2012-13 to 2017-18, 2020, <https://www.aihw.gov.au/reports/primary-health-care/disparities-in-potentially-preventable-hospitalisations-australia/data>

Figure 12 | Rate of potentially preventable hospitalisations due to chronic conditions, by Aboriginal status, by region, 2010-2018, NT



Despite these changes, the rates of potentially preventable hospitalisations due to chronic conditions for both Aboriginal and non-Aboriginal people were lower in the Top End than in Central Australia in 2017-18. The rate for non-Aboriginal people in the Top End was lower than for non-Indigenous people across Australia in that year.

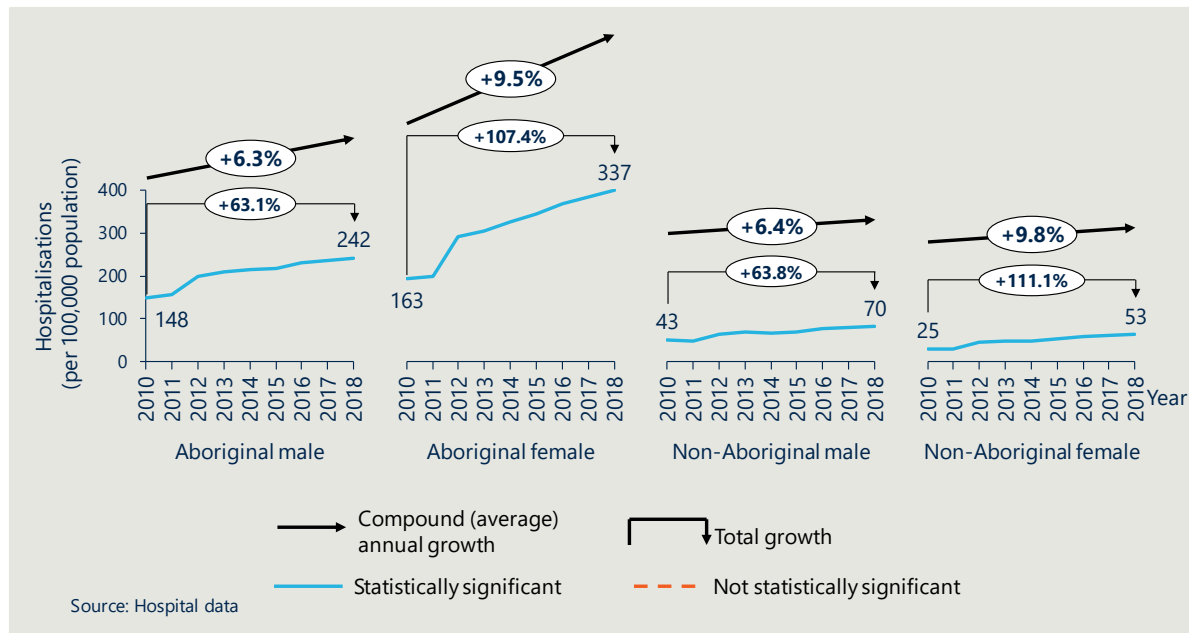
Rates of all hospitalisations due to chronic conditions increased for all population groups

Condition-by-condition data on the rate of potentially preventable hospitalisations due to chronic conditions was unavailable. This section presents data on the rate of all hospitalisations due to chronic conditions (both overall and condition-by-condition).

From 2010 to 2018, there were significant increases in the rate of all hospitalisations due to chronic conditions for Aboriginal and non-Aboriginal men and women. As shown in Figure 13:

- For Aboriginal men, there was a 63 per cent increase in the rate of all hospitalisations due to chronic conditions (from 148 to 242 per 100,000 population).
- For Aboriginal women, there was a 107 per cent increase in the rate of all hospitalisations due to chronic conditions (from 163 to 337 per 100,000 population).
- For non-Aboriginal men, there was a 63 per cent increase in the rate of all hospitalisations due to chronic conditions (from 43 to 70 per 100,000 population).
- For non-Aboriginal women, there was a 111 per cent increase in the rate of all hospitalisations due to chronic conditions (from 25 to 53 per 100,000 population).

Figure 13 | Rate of all hospitalisations due to chronic conditions, by Aboriginal status and gender, 2010-2018, NT



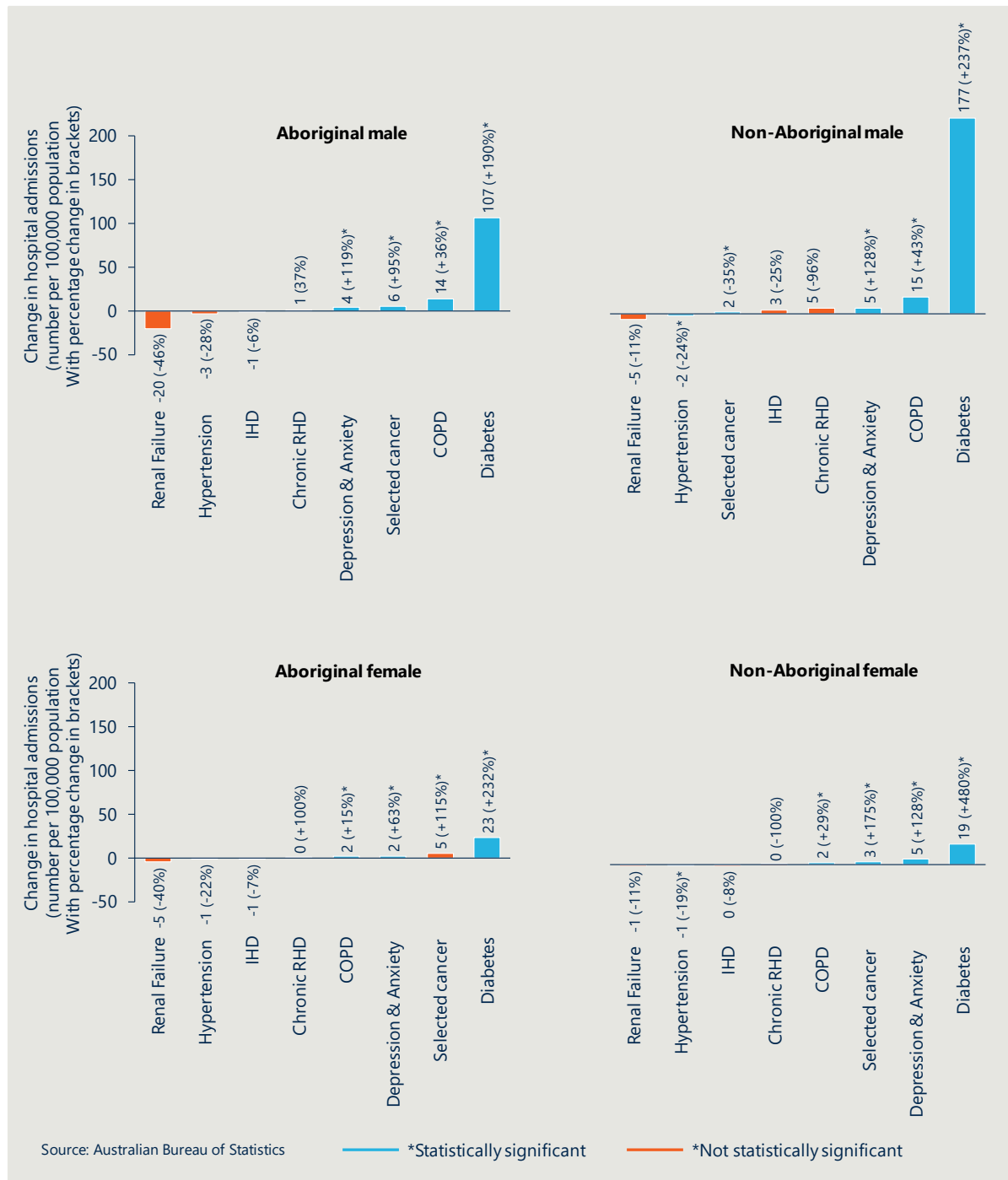
Over this same period (as shown in Figure 14):

- For all population groups, there were statistically significant increases in the rates of all hospitalisations due to diabetes, depression and anxiety, and COPD.
- For most population groups (excluding Aboriginal women), there were statistically significant increases in the rate of all hospitalisations due to selected cancers.

The increases in the rates of hospitalisations due to diabetes were particularly large (greater than 100 per cent for all population groups). While these increases may reflect increasing burden of these conditions, or ineffective primary health care, or other factors, they could also reflect improved detection and access to care.

There were also decreases in the rate of all hospitalisations due to renal failure for all population groups, but these were not statistically significant.

Figure 14 | Change in rate of all hospital admissions due to specified chronic conditions from 2010 to 2018, by Aboriginal status and gender, NT



More detailed data on the rate of all hospitalisations due to chronic conditions is included in Appendix B.

6.2 Key action area 1: Social determinants

Key action area 1 focuses on social determinants of health. The Strategy describes the social determinants of health as the social, economic, political, cultural and environmental contexts that enable or hinder the adoption of healthy behaviours.⁵²

The program logic specified the following outputs, outcome and assumption for this key action area:

- **Output 1:** Activities to raise awareness of social determinants are evident within the health sector.
- **Output 2:** Strong leadership is apparent to communicate social determinants to health and non-health staff and organisations.
- **Output 3:** Intersectoral action on social determinants is demonstrated in strategies for early childhood, childhood and adolescence, alcohol, and family violence.
- **Outcome:** Intersectoral collaboration and partnerships result in action on social determinants, and contribute to improved living conditions, food security, education, employment and health literacy.
- **Assumption:** The Department’s leaders act on social determinants of health.

This section presents findings about the extent to which these were observed in practice. These findings are summarised in Table 12 below.

Table 12 | Performance of the Strategy in key action area 1

Element of program logic		Finding
Output	Activities to raise awareness of social determinants are evident within the health sector.	Awareness of social determinants is widespread, and there is evidence of various organisations exercising leadership in communicating about them.
	Strong leadership is apparent to communicate social determinants to health and non-health staff and organisations.	
	Intersectoral action on social determinants is demonstrated in strategies for early childhood; childhood and adolescence; alcohol; and family violence.	NT Government and Department of Health strategies for these areas have been developed.
Outcome	Intersectoral collaboration and partnerships result in action on social determinants, and contribute to improved living conditions, food security, education, employment and health literacy.	Intersectoral collaboration and partnerships to address social determinants are evident to varying degrees across the NT. There has been improvement in the social determinants, including in housing, employment, education and food security, but in general performance was poor to begin with and hence remains comparatively low.
Assumption	NT Department of Health leaders act on social determinants of health.	The Department has shown leadership on social determinants through formal mechanisms (such as its Strategic Plan), advocacy, and internal measures. In some instances, its ability to act on social determinants is limited by the bounds of its funding and responsibilities. This is a common challenge across numerous jurisdictions.

⁵² The Department of Health, NT Chronic Conditions Prevention and Management Strategy 2010-2020, 2010, p6. <https://digitallibrary.health.nt.gov.au/prodjsui/handle/10137/535>

Table 13 lists the indicators the evaluation framework included for this key action area and how they were measured for this report. Analysis of these indicators along with other data and literature has provided the evidence base for this section.

Table 13 | Evaluation indicators for key action area 1

Indicator name	Measure used	Type
Access to health services	Number of health checks for Aboriginal and Torres Strait Islander people (MBS item number 715) per 100,000 population	Quantitative
Health literacy	Consultation themes regarding activities undertaken to promote and improve health literacy of clients, health professionals and health organisations	Qualitative
Intersectoral relationships	Consultation themes regarding activities undertaken to promote and improve living conditions, food security, education and employment	Qualitative

6.2.1 Extent to which outputs in program logic have been realised

6.2.1.1 Awareness of social determinants is widespread, and there is evidence of organisations exercising leadership in communicating about them

Awareness of social determinants was widespread among interview and focus group participants, including the small number from the education sector, and survey respondents.⁵³ For example, social determinants were the most commonly cited enablers and barriers to further improvement in chronic conditions prevention and management.

There is evidence of health sector organisations exercising leadership in relation to social determinants. For example:

- The Department has emphasised social determinants of health in high-profile documents such as its recent strategic plan,⁵⁴ which includes a commitment to address them and an objective to work with partners to progress this.
- The Heart Foundation has been vocal in addressing social determinants as a critical priority to “enhancing the health of Aboriginal and Torres Strait Islander people.”⁵⁵ Its activities relating to social determinants include research, policy submissions, advocacy, and initiatives to support healthier lifestyles in areas like food and exercise.⁵⁶
- Some NGOs have created structures and collaborations such as the Good Health Alliance to advocate more effectively, influence social determinants and avoid duplication in their prevention programs.⁵⁷ To illustrate, the Good Health Alliance has provided input relating to social determinants into various NT Government policies, programs and plans.⁵⁸

⁵³ While efforts were made to consult stakeholders from a range of other sectors, the evaluation team was only able to meet with those from the education sector.

⁵⁴ NT Health, Northern Territory Health Strategic Plan 2018-2022, 2018 <https://digitallibrary.health.nt.gov.au/prodjspsui/bitstream/10137/2729/3/Northern%20Territory%20Health%20Strategic%20Plan.pdf>.

⁵⁵ Heart Foundation, What are the social determinants of health and why do they matter? 2018. <https://www.heartfoundation.org.au/news/what-are-the-social-determinants-of-health-and-why-do-they-matter>

⁵⁶ Heart Foundation website accessed 1 March 2020 <https://www.heartfoundation.org.au/>

⁵⁷ Menzies School of Health Research, Mid-term evaluation: Chronic Conditions Prevention and Management Strategy 2010-2020, 2016.

⁵⁸ Cancer Council NT website, Good Health Alliance NT, accessed 1 Mar 2020

- The NT Aboriginal Cultural Security Policy (launched in 2007) and the NT Health Aboriginal Cultural Security Framework 2016-2026 seek to reduce the gap in health for Aboriginal people through more culturally secure, accessible and appropriate services.⁵⁹
- The Pathways to Community Control Co-operative Framework, announced in 2009,⁶⁰ aimed to increase the participation of Aboriginal people in making decisions about their health through greater community control of health services.
- AMSANT describes one of its key roles as advocating to governments, government agencies and stakeholders on the social and cultural determinants of health.⁶¹

A case study about AMSANT's activities in relation to social determinants of health is included in Figure 15.

<https://nt.cancer.org.au/about-us/committees/nt-committees/ghant.html>

⁵⁹ NT Health, Aboriginal Cultural Security Framework 2016-2026, p8

<https://digitallibrary.health.nt.gov.au/prodjsui/bitstream/10137/730/8/Northern%20Territory%20Health%20Aboriginal%20Cultural%20Security%20Framework%202016-2026.pdf>

⁶⁰ Agreements, treaties, and negotiated settlements project website, retrieved 12 May 2020.

<https://www.atns.net.au/agreement.asp?EntityID=4980>

⁶¹ AMSANT, Policy and Research, retrieved 18 Mar 2020.

<http://www.amsant.org.au/research/>

Figure 15 | Case study: AMSANT's activities in relation to social determinants

AMSANT is the peak body in the NT for the ACCHO sector, with 26 member services. It provides practical support to services in areas such as CQI, workforce leadership and support, and accreditation. It also has a significant focus on research, policy and advocacy.

Social determinants of health are a major focus for AMSANT

The organisation's strategic plan outlines its commitment to address social determinants through advocacy, research and growing Aboriginal Community Controlled Health care.⁶² Given its position as a peak body for Aboriginal health, it receives information about health and social determinants in Aboriginal communities across the NT, and the complex interplay between issues such as education, employment, justice, food security and many others. In the words of one senior staff member during a consultation conducted for this evaluation, "these things are circular, feeding into each other".⁶³

AMSANT's advocacy is wide-ranging, targeting the NT and Australian Governments, Ministers and Parliaments, the public and other stakeholders, across housing, nutrition, education and training, employment, racism, and many others.⁶⁴

AMSANT advocates for social determinants in a number of ways

Advocating through strategic alliances and representative bodies

As a peak body, AMSANT has many connections and can access wide information from its members, the communities they serve, and other stakeholders, and has created a strong network of alliances and strategic partnerships which it is putting to use to advance social determinants.

Prominent among these relationships is its membership of the Aboriginal Peak Organisations Northern Territory (APO NT), a cross-sectoral partnership between AMSANT, the Northern Land Council, Central Land Council, and Aboriginal Housing NT. Examples of APO NT's work in relation to social determinants include:

- working to formalise Aboriginal Housing NT as the peak Aboriginal housing body for the NT, expanding Aboriginal community control in this crucial social determinant
- engaging with reforms in child protection and youth justice
- developing an alternative model to the Community Development Program (CDP) in collaboration with CDP providers and Aboriginal organisations
- providing input into the implementation of the NT Government's Local Decision Making policy.

Another important relationship is AMSANT's place as one of the eight Affiliates of the National Aboriginal Community Controlled Health Organisation (NACCHO). NACCHO advocates with governments and organisations on health service delivery and public health, promoting Aboriginal health and wellbeing, and fostering relationships.⁶⁵

AMSANT is also one of the members of the Coalition of Aboriginal and Torres Strait Islander Peak Organisations (Coalition of Peaks), a representative body partnering with Australian governments on Closing the Gap since 2019.⁶⁶ As part of this group, AMSANT can advocate for change across several social determinants across early childhood, education, and employment, as well as health services themselves.

Advocating through research and submissions

AMSANT produces submissions and research regarding the social determinants. To illustrate, in recent years it has drafted the following submissions (among others):

- the Climate Change Discussion Paper, touching on livelihoods, food security, water supply and economic growth
- the Productivity Commission study on Expenditure on Children in the NT
- the Select Committee on Intergenerational Welfare Dependence
- the Royal Commission into the Protection and Detention of Children in the NT.

It has also drafted a research paper on the interplay between Closing the Gap policies and the social determinants of health.⁶⁷

Strengthening Aboriginal leadership

AMSANT believes that an important factor in lifting social determinants for Aboriginal communities is employing more Aboriginal people in senior roles. This is difficult when lack of training is a barrier, particularly in remote communities.⁶⁸ To address this issue, AMSANT has entered into a Leadership Development Partnership with the Australian Indigenous Leadership Centre, to deliver regional workshops to ACCHO staff in the NT, to develop and grow the sector.⁶⁹ AMSANT also has a Workforce and Leadership Support Unit to support its members on key projects in priority areas.

6.2.1.2 Intersectoral action on social determinants is evident in recent NT Government strategies

Several stakeholders noted that the Strategy was the first of its kind in the NT to focus on social determinants and that it marked a shift from a purely health-focused approach to one that better recognised social determinants. One of the actions in the Strategy was to “provide leadership to strengthen intersectoral collaboration in relation to chronic conditions.”⁷⁰ A number of NT Government strategies addressing social determinants have been developed over the past decade (a selection of which is summarised in Table 14). All these strategies recognised the relationship between social determinants and health outcomes, and responsibility for two of them (those focusing on early childhood and domestic, family and sexual violence) was shared between multiple areas of government.

Table 14 | NT Government strategies that focus on intersectoral action on social determinants of health

Strategy	Ministers responsible	Extent of focus on social determinants
A Home for All Territorians: NT Housing Strategy 2020-2025 ⁷¹	<ul style="list-style-type: none"> Minister for Local Government, Housing and Community Development 	The strategy states that housing is “central to maintaining good physical and mental health”. It highlights the risks from overcrowding on conditions such as infections. The Action Plan 2020-2025 within the strategy contains actions involving intersectoral stakeholders including the Department, NT and Commonwealth governments, non-government sector and local communities.
Great Start, Great Future: NT Early Years Strategic Plan (2016-2020) ⁷²	<ul style="list-style-type: none"> Minister for Health Minister for Education Minister for Children and Families 	The strategy emphasises the influence of social determinants on health outcomes. For example, it includes “enabling young parents to complete secondary schooling” as an action to improve children’s health outcomes.
The Best Opportunities in Life: NT Child and Adolescent Health and Wellbeing Strategic Plan (2018-2028) ⁷³	<ul style="list-style-type: none"> Minister for Health 	This strategy outlines that disadvantages across social determinants lead to ill health and social inequity, emphasising this accumulates throughout life and impacts on future generations. The plan emphasises the Social Model of Health framework, to create equitable conditions that prevent and reduce adverse health outcomes and protect and promote the long-term health of young people in the NT.

⁶² AMSANT Strategic Plan 2019-2023, p9-10.

<http://www.amsant.org.au/wp-content/uploads/2019/08/AMSANT-Strategic-Plan-2019-23.pdf>

⁶³ Quote from stakeholder consultation with AMSANT as part of this evaluation.

⁶⁴ AMSANT website, accessed 28 April 2020 <https://www.amsant.org.au/research/>

⁶⁵ NACCHO website, accessed 29 April 2020 <https://www.naccho.org.au/about/>

⁶⁶ Partnership Agreement on Closing the Gap 2019-2029. <https://www.naccho.org.au/wp-content/uploads/MS19-000697-Partnership-Agreement-on-Closing-the-Gap-2019-202973948.pdf>

⁶⁷ Cooper, D, 2011. ‘Closing the gap in cultural understanding: social determinants of health in Indigenous policy in Australia’. Aboriginal Medical Services Alliance of the Northern Territory (AMSANT), Darwin.

⁶⁸ Interview with AMSANT.

⁶⁹ AMSANT Media release, 17 May 2019, accessed 28 April 2020 at http://www.amsant.org.au/wp-content/uploads/2019/05/MEDIA-RELEASE-AMSANT_AILC-Leadership-17.05.19.pdf

⁷⁰ The Department, NT Chronic Conditions Prevention and Management Strategy 2010-2020, 2010.

<https://digitallibrary.health.nt.gov.au/prodjsmui/handle/10137/535>

⁷¹ Developed by the NT Department of Local Government, Housing and Community Development.

https://dlghcd.nt.gov.au/_data/assets/pdf_file/0010/765433/nt-housing-strategy-2020-2025.pdf

⁷² Developed by the NT Government. https://earlychildhood.nt.gov.au/_data/assets/pdf_file/0008/439037/great_start_great_future_early_years_strategic_plan.pdf

⁷³ Developed by the NT Department of Health, 2018-2028

<https://digitallibrary.health.nt.gov.au/prodjsmui/bitstream/10137/7231/1/The%20Best%20Opportunities%20in%20Life%20Northern%20Territory%20Child%20and%20Adolescent%20health%20and%20Wellbeing%20Strategic%20Plan%202018%20-%202028.pdf>

NT Alcohol Harm Minimisation Action Plan 2018-19 ⁷⁴	<ul style="list-style-type: none"> • Minister for Health 	This strategy articulates that to progress with alcohol harm initiatives, the underlying social determinants of health must be addressed. The strategy gives examples of other relevant government initiatives (outside of the health sector) which will help to address social determinants, such as the Room to Breathe Program, which aims to reduce overcrowding in public housing in remote communities by investing \$200 million over ten years to increase space in existing homes.
The NT's Domestic, Family and Sexual Violence Reduction Framework 2018-2028 ⁷⁵	<ul style="list-style-type: none"> • Chief Minister • Minister for Territory Families 	This strategy emphasises that forms of social inequality can contribute to social and cultural environments where violence occurs. For example, it includes initiatives to educate the community about family violence, and actions to refocus the justice system on the rehabilitation and restoration of perpetrators to violence-free families. NT Health released the <i>Domestic and Family Violence Policy: NT Health Policy</i> in response to this framework. ⁷⁶
Starting Early for a Better Future. Early Childhood Development in the Northern Territory 2018-2028 ⁷⁷	<ul style="list-style-type: none"> • Chief Minister • Minister for Children 	This early childhood development plan includes programs and commitments across health, education, housing, safety and food security. Targets for 2022 include ensuring families have access to affordable, nutritious and fresh food, fewer overcrowded homes and people experiencing homelessness, and communities being actively involved in local decision making.
Safe, Thriving and Connected: Generational Change for Children and Families ⁷⁸	<ul style="list-style-type: none"> • Chief Minister • Minister for Children 	This reform explicitly reflects the Royal Commission's recommendation that the NT adopt a public health approach for children and families, with a coordinated approach "to address the social determinants of health and wellbeing and concurrently address the specific needs of individuals and families". ⁷⁹ It includes a wide range of investments across the social determinants, including child protection and youth justice, housing, education, health, and Local Decision Making.

⁷⁴ Developed by the NT Government, 2018-2019

https://alcoholreform.nt.gov.au/_data/assets/pdf_file/0008/485315/AHMPlan_2018.pdf

⁷⁵ Developed by the NT Government, https://territoryfamilies.nt.gov.au/_data/assets/pdf_file/0006/464775/Domestic-Family-and-Sexual-Violence-Reduction-Framework.pdf

⁷⁶ Central Australia Health Service, Service Delivery Agreement 2019-2020, p22,

<https://digitallibrary.health.nt.gov.au/prodjspsui/bitstream/10137/7740/1/CAHS%20SDA%202019%20to%202020%20Service%20Delivery%20Agreement.pdf>

Top End Health Service, Service Delivery Agreement 2019-2020, p22,

<https://digitallibrary.health.nt.gov.au/prodjspsui/bitstream/10137/7742/1/TEHS%20Service%20Delivery%20Agreement%202019%20to%202020.pdf>

⁷⁷ Developed by the NT Government. https://earlychildhood.nt.gov.au/_data/assets/pdf_file/0003/450885/starting-early-for-a-better-future.pdf

⁷⁸ Developed by the NT Government. https://rmo.nt.gov.au/_data/assets/pdf_file/0005/498173/Safe-Thriving-and-Connected-Implementation-Plan-Web.pdf

⁷⁹ NT Government, *Safe, Thriving and Connected: Generational Change for Children and Families* 2018-2023, p10.

https://rmo.nt.gov.au/_data/assets/pdf_file/0005/498173/Safe-Thriving-and-Connected-Implementation-Plan-Web.pdf

6.2.2 Extent to which outcome in program logic has been achieved

6.2.2.1 Intersectoral collaboration to address social determinants is evident to varying degrees across the NT

Many health professionals noted limits on their ability to influence social determinants

In consultations, many health professionals said they were limited in their ability to influence social determinants such as housing, education and employment. This perception may reflect their scope of practice and/or a lack of awareness of or capability in how to communicate and engage with other sectors outside of health to progress action on social determinants.

Recent literature and current practice in other jurisdictions highlights actions health professionals can take to effect change outside of the health sector. These include advocating to partners from non-health sectors, engaging and collaborating with them, and providing them with information and resources to guide action and decision making. This highlights a potential need to build the capability of the NT health sector workforce in these areas. One way to achieve this would be through the commitment in the NT Health Workforce Strategy to strengthen relationships with strategic partners through opportunities for secondments and cross-service collaboration.⁸⁰

There are examples of collaboration to address social determinants at all levels

Stakeholders across locations at all levels recognised the need for intersectoral collaboration to address social determinants. Examples were offered of collaboration taking place between government and NGOs (including ACCHOs), between health and non-health organisations, and at the local and territory levels. These examples included:

- the ACCHO sector advocating for structural change via the National Aboriginal Community Controlled Health Organisation
- Aboriginal Housing NT, a collaboration between AMSANT, the Northern Land Council, the Central Land Council and housing bodies across the NT
- the Department of Local Government, Housing and Community Development working with mental health providers to keep tenants in public housing
- Regional Coordination Committees that bring together senior NT Government representatives and community leaders to address local issues⁸¹
- the Australian Government's investment in food security through the Stronger Futures funding package, including licensing community stores in the NT⁸²
- the People's Alcohol Coalition, an unincorporated association with members including individuals and organisations
- health services partnering with local schools to provide curriculum specific health and nutrition education materials for teachers.

⁸⁰ NT Health Workforce Strategy 2019-2022, p17. <https://digitallibrary.health.nt.gov.au/prodjspui/handle/10137/7753>

⁸¹ Keogh Bay, "NT Government, Department of the Chief Minister – Organisational Review for Big Rivers Regional Coordination Committee", 2018. <https://keoghbay.com.au/2018/09/11/nt-government-department-of-the-chief-minister-organisational-review-for-big-rivers-regional-coordination-committee/>

⁸² Australian Government, Stronger Futures in the Northern Territory, July 2012, p26. https://www.dss.gov.au/sites/default/files/documents/09_2012/stronger-futures-booklet-jul2012.pdf

Awareness of such intersectoral collaboration varied by location. In Alice Springs, Darwin and Katherine, stakeholders identified a range of examples of intersectoral collaboration to address social determinants, such as those above. In Nhulunbuy and Tennant Creek, stakeholders identified fewer examples and suggested either it did not occur or occurred only in response to crises. An example of local-level collaboration to address social determinants is included in the case study in Figure 16 below.

Awareness of intersectoral collaboration also varied by seniority of staff. It was greatest at the leader level, followed by the middle manager level; it varied among front line staff. At the manager and leader level, people identified forums where these issues were discussed, such as the Regional Coordination Committees and the CDNSC. At the front-line level, many people were unaware of such collaboration. This may be due to their more operationally focused roles.

“Collaboration across organisations may be occurring at a higher level but health care providers on the ground are not involved and are unaware of progress in different locations.”

Figure 16 | Case study: Katherine Individual Support Program

Several stakeholders across the NT identified the Katherine Individual Support Program (KISP) as an example of inter-sectoral action to address social determinants of health.

People who frequently attend the Katherine Hospital Emergency Department have high rates of poor health, addiction and homelessness. They also face social and environmental challenges that make it almost impossible for them to access holistic primary care.

KISP is a collaboration between Wurli Wurlinjang Health Service, Katherine Hospital and other key stakeholders in Katherine that provides tailored case management to help such people get back on their feet. It aims to reduce repeat presentation to the Emergency Department, improve clients' health outcomes and access to support services, and build a strong stakeholder framework that ensures the program continues into the future. The KISP team works in partnership with clients and the homeless community to provide a culturally appropriate and comprehensive service that is influenced by the social and emotional wellbeing framework and a recovery-focused model of care.

All Katherine-based stakeholders meet routinely to participate in case management. A reference group manages operations and addresses challenges as they arise. Wurli Wurlinjang is solely responsible and reports transparently to NT Department of Health on the strategy, governance and financial accountability for the program.

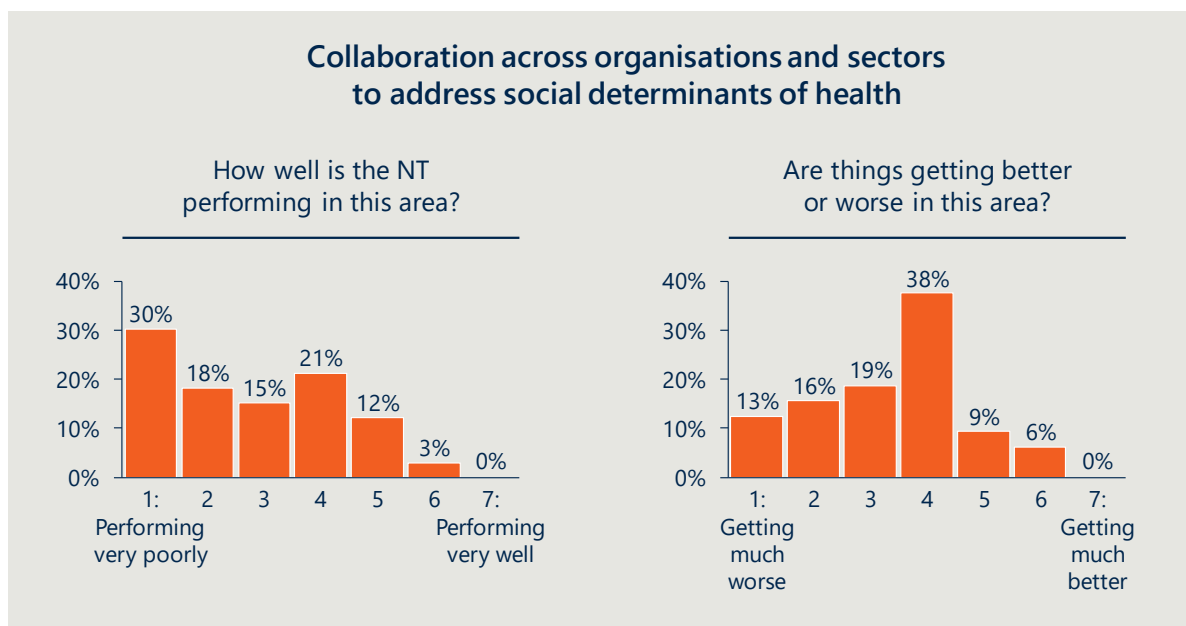
KISP is a positive example of collaboration between a government-run health service (Katherine Hospital) and an Aboriginal Community Controlled Health Service (Wurli Wurlinjang) to address social determinants through a holistic approach.

Stakeholders generally agreed that more collaboration is needed

While many examples of intersectoral collaboration were identified, in general stakeholders indicated that more such collaboration was needed at all levels. This was evident among both survey respondents and interview and focus group participants. For example, among survey respondents (as shown in Figure 17):

- 63 per cent indicated the NT was performing poorly in collaboration across organisations and sectors to address social determinants, compared to 15 per cent who thought it was performing it well.
- 48 per cent indicated the NT was getting worse in this area, as compared to 15 per cent who indicated it was getting better.

Figure 17 | Survey results regarding collaboration across organisations and sectors to address social determinants of health



Barriers to intersectoral collaboration that stakeholders identified included:

- the existence of silos within the health sector (for example, between the Department, TEHS and CAHS), between the health sector and other sectors (for example, education), between the government, non-government and Aboriginal Community Controlled Health sectors, and elsewhere (for example, between individual chronic conditions networks)
- government departments being funded and tasked to perform defined responsibilities
- a reactive (rather than strategic) approach that can lead to duplication in services
- a focus on bigger population centres such as Darwin and Alice Springs.

Many stakeholders highlighted the need for a whole-of-government approach to address social determinants, including the involvement of other sectors like justice, education and housing.

Several stakeholders suggested the Strategy had enabled collaboration; for example, by providing a platform for engagement.

“The current [practice] of working in silos is not doing much to rectify the bigger problem before us”.

6.2.2.2 There have been improvements for some social determinants, but performance was poor to begin with and hence remains comparatively low

Stakeholders generally indicated there has been limited improvement in the social determinants of health. The most commonly cited social determinant in this regard was housing. Others that were commonly cited included employment and economic participation, education, justice, and food and water security. Other evidence on social determinants suggests there has been improvement, including in housing, employment, education and food security, but in general performance was poor to begin with and hence remains comparatively low (see Table 15 below).

“The reality on the ground today in relation to the social determinants of health [is] dire”.

Table 15 | Trends in a selection of social determinants in the NT

Social determinant	Key trends among Aboriginal and Torres Strait Islander people
Housing	<p>Overcrowding declined but is still highly prevalent</p> <p>The percentage of Aboriginal and Torres Strait Islander people living in overcrowded households in the NT declined from 66 per cent in 2011 to 51 per cent in 2016. (For comparison, nationally it declined from 25 per cent in 2011 to 18 per cent in 2016.)⁸³</p> <p>Construction and refurbishment of houses was insufficient to address need</p> <p>A review of the National Partnership Agreement on Remote Indigenous Housing and the Remote Housing Strategy (2008-2018) found they resulted in 1,504 homes in the NT being built and 2,929 refurbished. However, it also reported that the backlog of remote Indigenous housing in the NT was larger than in any other jurisdiction, and that the NT Government estimates an additional 5,200 new houses are required by 2028 to address overcrowding.⁸⁴</p>
Employment	<p>The employment rate increased but remains comparatively low.</p> <p>There was a small increase in the employment rate for Aboriginal and Torres Strait Islander people in the NT from 2008 to 2018-19. The NT was one of only two jurisdictions (along with NSW) in which this indicator increased over this period. However, the indicator remained lower in the NT than in any other state or territory, slightly below WA.⁸⁵ (This information was only reported graphically; the exact rates were not provided.)</p>
Education	<p>Year 12 attainment increased but remains comparatively low</p> <p>The Year 12 or equivalent attainment rate for Aboriginal and Torres Strait Islander students in the NT increased from 18 per cent in 2006 to 39 per cent in 2016. This was the largest proportional increase in any Australian jurisdiction over this period. However, over this period, the NT nonetheless had the lowest Year 12 attainment rates of any state or territory.⁸⁶</p>
Food security	<p>A range of initiatives have been undertaken to improve food security in remote communities, some with the support of the Strategy</p> <p>The <i>Stronger Futures in the NT Act 2012</i> (Commonwealth) included special measures to improve food security in remote communities, primarily through licensing of community stores.⁸⁷ This legislation also provided funding for stores to provide training, improve buildings, and support the management and infrastructure of healthy food options, including storage, refrigeration and shelving.⁸⁸ It also imposed penalties for stores not open when they are meant to be.⁸⁹ An evaluation of the Act found stakeholders had positive views about its contribution to health and wellbeing as well as to store licensing (for example, assessment, enforcement and capacity-building matters).</p> <p>The 'Good Food Systems Project' undertaken by Menzies School of Health Research and partners has also sought to "strengthen the knowledge of and skills of Aboriginal and</p>

⁸³ AIHW, *Housing Circumstances of Indigenous Households: Tenure and Overcrowding*, 2014.

<https://www.aihw.gov.au/getmedia/c1daa420-3547-497c-b964-17b149ceba02/17718.pdf.aspx?inline=true>

AIHW, *Aboriginal and Torres Strait people: a Focus Report on Housing and Homelessness*, 2016.

<https://www.aihw.gov.au/getmedia/1654e011-dccb-49d4-bf5b-09c4607eccc8/aihw-hou-301.pdf.aspx>

⁸⁴ Commonwealth of Australia, *Remote Housing Review: A Review of the National Partnership Agreement on Remote Indigenous Housing and the Remote Housing Strategy (2008-2018)*. https://parliament.nt.gov.au/_data/assets/pdf_file/0003/706683/TP-5-1.pdf

⁸⁵ Department of the Prime Minister and Cabinet, *Closing the Gap: Prime Minister's Report*, 2018.

<https://www.pmc.gov.au/sites/default/files/reports/closing-the-gap-2018/sites/default/files/ctg-report-20183872.pdf?a=1>

⁸⁶ Department of the Prime Minister and Cabinet, *Closing the Gap: Report*, 2020, p69.

<https://ctgreport.niaa.gov.au/sites/default/files/pdf/closing-the-gap-report-2020.pdf>

⁸⁷ Prime Minister and Cabinet, *Stronger Futures in the NT*, 2012.

https://www.dss.gov.au/sites/default/files/documents/09_2012/stronger-futures-booklet-jul2012.pdf

⁸⁸ Prime Minister and Cabinet, *Stronger Futures in the NT*, 2012.

https://www.dss.gov.au/sites/default/files/documents/09_2012/stronger-futures-booklet-jul2012.pdf

⁸⁹ Prime Minister and Cabinet, *Stronger Futures in the NT*, 2012.

https://www.dss.gov.au/sites/default/files/documents/09_2012/stronger-futures-booklet-jul2012.pdf

Torres Strait Islander communities to influence their own food system.”⁹⁰ This has been implemented through initiatives such as the development of the ‘Good Food Planning Tool’ which identifies the five areas that are needed for good community nutrition and food security; and initiatives undertaken by community stores, such as placing the healthy food in a way that encourages healthy food choices accessible places.⁹¹ This tool box also includes a check-list to guide food businesses to promote and price healthy foods in store.⁹²

Initiatives such as the NT Nutrition and Physical Activity Strategy were supported by the Strategy on which this evaluation focuses (for example, through inclusion in implementation plans).⁹³

Activities such as the Nutrition and Physical Activity Workshop have had continual promotion of this strategy over the last ten years.

There is evidence that healthy food is cheaper than current diets, and the variety of healthy food available has improved, in remote areas

The NT Market Basket Survey 2017 found that the average cost of the standardised ‘Current Diet Basket’ (CDB) was more expensive than the ‘Healthy Food Basket’ (HFB) in all districts and store types surveyed. The CDB was 8 per cent more expensive than the HFB in remote stores, 4 per cent higher in corner stores, and 23 per cent higher in district centre supermarkets.

From 2000 to 2017, there was an increase in the average number of varieties of fresh fruit and vegetables.⁹⁴

Stakeholders nonetheless indicated food security is a continuing challenge

Many stakeholders indicated it is a continuing challenge, due to:

- limited affordability, availability and variety of healthy food, particularly in remote communities
- the difficulty of shifting people’s food preferences and behaviours, particularly where there are strong incentives to purchase unhealthy options; for example, limited capacity to store food securely in overcrowded housing.

Some stakeholders suggested initiatives undertaken to improve the availability or attractiveness of healthy food options in stores were unsustainable, due to staff turnover or a lack of interest from the stores.

This contrasts with data suggesting healthy food is more affordable than current diets in remote communities. (Though there is evidence that discounting the price of fruit and vegetables increases the amount purchased in remote community stores.)⁹⁵

Water security

Stakeholders also raised concerns about water security

The ‘swap soft drinks for water’ initiative was difficult to achieve in more remote areas without access to clean water. Stakeholders identified that water in many locations was contaminated by high levels of heavy metals, nitrates and PFAS⁹⁶ which is hazardous, rendering the water not fit for consumption. Bottled water is often expensive and instead, relatively cheaper sugar sweetened beverages are chosen. There have been initiatives to

⁹⁰ Menzies School of Health Research, Developing a Good Food System in your community -Information Sheet 6, 2014 https://www.menzies.edu.au/icms_docs/252294_Information_sheet_6.pdf

⁹² Menzies School of Health Research, Developing a Good Food System in your community -Information Sheet 6, 2014 https://www.menzies.edu.au/icms_docs/252294_Information_sheet_6.pdf

⁹³ NT Department of Health, NT Chronic Conditions Prevention and Management Strategy 2010-2020: Implementation Plan 2014-2016.

⁹⁴ NT Department of Health, NT Market Basket Survey, 2017 <https://digitalibrary.health.nt.gov.au/prodjspuj/handle/10137/7711>

⁹⁵ Brimblecombe J et al., ‘Effect of a price discount and consumer education strategy on food and beverage purchases in remote Indigenous Australia: a stepped-wedge randomised controlled trial’ (2017) *Lancet Public Health* 2017;2, p82.

⁹⁶ Per- and Poly-fluoroalkyl Substances (PFAS) are a group of man-made chemicals which do not break down in soil or water and can accumulate in humans. There is ongoing research to understand the health impacts of PFAS exposure and accumulation. (From: Department of Health, PFAS Health effects and exposure pathways, retrieved 19 Mar 2020. [https://www1.health.gov.au/internet/main/publishing.nsf/Content/44CB8059934695D6CA25802800245F06/\\$File/health-effects-exposure-factsheet.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/44CB8059934695D6CA25802800245F06/$File/health-effects-exposure-factsheet.pdf)

reduce the price of bottled water (for example, Outback Stores made bottled water the cheapest option in 2012).⁹⁷

Health literacy remains low, in particular for Aboriginal consumers and communities

Health literacy is about how people understand and act on information about health and health care.⁹⁸ Health services play a role in helping consumers to understand the information they provide, and support consumers to make sense of often complex health information. The NT Health Aboriginal Cultural Security Framework includes a prominent focus on health literacy, particularly in its second domain, 'Communication', which includes action areas on:

- using interpreters with strong health literacy skills
- increasing clinical staff training and awareness of health literacy and communication techniques
- tailoring health education sessions for Aboriginal people to improve health literacy
- ensuring materials available in regional and local Aboriginal dialects and language groups.⁹⁹

During consultations, discussions about health literacy focused on Aboriginal consumers and communities. Stakeholders generally agreed that consumers' health literacy remains low, though some suggested it varies between consumers and communities. Some stakeholders identified improvements in health literacy. For example, stakeholders from the ACCHO sector reported consumers are improving their understanding of particular conditions, such as diabetes, and of how to seek assistance; for example, to quit smoking. However, the rates of diabetes have been persistently high in Aboriginal Territorians (see Section 6.1.5), and stakeholders generally believed the reduction in smoking has not translated to remote Aboriginal people (see Section 6.3).

Initiatives that stakeholders identified as beneficial for health literacy included providing nutrition curriculum resources for teachers, and health literacy committees maintaining written resources.

Enablers for health literacy commonly cited by stakeholders included:

- culturally appropriate educational resources and programs (including in first languages where appropriate)
- low staff turnover to enable ongoing relationships between health professionals and consumers
- staff who are Aboriginal and/or from the local community
- training for health professionals
- active use of interpreters
- involving community members to share their experiences; for example, of a particular disease or of quitting smoking).

Low literacy in general was cited as a barrier to health literacy.

The evaluation framework included access to health services as an indicator for social inequity

Quantitative data for this indicator was unavailable. However, the large increases in health checks, including those specifically for Aboriginal and Torres Strait Islander people (MBS item number 715), suggest access to health services may have improved (see Section 6.4).

⁹⁷ Outback Stores media release (2013) https://outbackstores.com.au/wp-content/uploads/2018/01/Media-Release-2013_Low-Cost-Water-Benefits-Health-in-Remote-Communities-1.pdf

⁹⁸ NT Health, Aboriginal Cultural Security Framework 2016-2026, p7
<https://digitallibrary.health.nt.gov.au/prodjspsui/bitstream/10137/730/8/Northern%20Territory%20Health%20Aboriginal%20Cultural%20Security%20Framework%202016-2026.pdf>

⁹⁹ NT Health, Aboriginal Cultural Security Framework 2016-2026, p27
<https://digitallibrary.health.nt.gov.au/prodjspsui/bitstream/10137/730/8/Northern%20Territory%20Health%20Aboriginal%20Cultural%20Security%20Framework%202016-2026.pdf>

6.2.3 Extent to which the assumption in program logic has been substantiated

6.2.3.1 The Department's leaders are acting on social determinants

The program logic made the following assumption for this key action area: "NT Department of Health leaders act on social determinants of health." The available evidence generally substantiates this assumption, as explored in the sections on the key action area's outputs and outcomes above.

Regarding formal channels of leadership and advocacy, the importance of collaborating on social determinants is reflected in NT Health's strategic plan, which sets an objective to work with partners on social determinants.¹⁰⁰ It is also but reflected (if less prominently) in the Service Delivery Agreements with TEHS and CAHS, such as in Schedule 5, which specifies that services should be delivered to align with a range of strategic directions, documents and frameworks.¹⁰¹ Among these are 'Best Opportunities in Life - Northern Territory Child and Adolescent Health and Wellbeing Strategic Plan 2018-2028', 'Domestic and Family Violence Policy NT Health Policy' and 'NT Health Nutrition and Physical Activity Strategy 2015-2020'.

Regarding less structured channels, one senior leader in the Department mentioned efforts to take a whole-of-government approach to addressing chronic conditions, for example by hiring staff from other agencies. However, they noted that NT Health and other agencies are limited in their ability to influence social determinants by the bounds of the responsibilities they are funded to fulfil. This is a common challenge across numerous jurisdictions. For example, the Victorian Public Health and Wellbeing Plan 2019-2023, WA Health Promotion Strategic Framework 2017-2021, and the ACT Preventative Health Plan 2020-2025 all articulate the complexity of addressing the full spectrum of social determinants of health, and the need for a whole-of-government response.

6.3 Key action area 2: Primary prevention and risk factors

Key action area 2 focuses on primary prevention and risk factors. The Strategy defines primary prevention as preventing or reducing risk factors in the 'well' population to prevent them moving into the 'at risk' population, particularly at sensitive periods in the lifespan. The Strategy defines risk factors as "characteristics or behaviours that are associated with an increased risk of developing a particular disease or condition." A risk factor may cause a condition or merely correlate with it. While a social determinant may be a risk factor, this section focuses on behavioural risk factors such as high alcohol use, tobacco smoking and being overweight or obese, which were specified in the evaluation indicators.

The program logic specified the following outputs, outcome and assumption for this key action area:

- **Output 1:** Population risk factors reporting increases community awareness and facilitates policy and planning processes.
- **Output 2:** Collaborative work is completed to establish healthy environments and workplaces.
- **Output 3:** Health and non-health organisations are collaborating to reduce lifestyle risk factors associated with chronic conditions.

¹⁰⁰ NT Government, NT Health Strategic Plan 2018-2022, p17

<https://digitallibrary.health.nt.gov.au/prodjspu/bitstream/10137/2729/3/Northern%20Territory%20Health%20Strategic%20Plan.pdf>

¹⁰¹¹⁰¹ Central Australia Health Service, Service Delivery Agreement 2019-2020, p22

<https://digitallibrary.health.nt.gov.au/prodjspu/bitstream/10137/7740/1/CAHS%20SDA%202019%20to%202020%20Service%20Delivery%20Agreement.pdf>

Top End Health Service, Service Delivery Agreement 2019-2020, p22,

<https://digitallibrary.health.nt.gov.au/prodjspu/bitstream/10137/7742/1/TEHS%20Service%20Delivery%20Agreement%202019%20to%202020.pdf>

- **Outcome:** Behaviours and environmental factors that promote and support health and wellbeing have improved.
- **Assumption:** Other government and non-government organisations collaborate on sustained health and wellbeing initiatives that impact on behaviours and environmental factors.

This section presents the findings about the extent to which these were realised. The findings are summarised in Table 16 below.

Table 16 | Performance of the Strategy in key action area 2

Element of program logic		Finding
Output	Population risk factors reporting increases community awareness and facilitates policy and planning processes.	Population risk factors are reported on at the NT and national levels.
	Collaborative work completed to establish healthy environments and workplaces.	Organisations have collaborated to promote healthy environments and address modifiable risk factors.
	Health and non-health organisations are collaborating to reduce lifestyle risk factors associated with chronic conditions.	
Outcome	Behaviours and environmental factors that promote and support health and wellbeing have improved.	There have been improvements in some risky behaviours and environmental factors, in some locations.
Assumption	Other government and non-government organisations collaborate on sustained health and wellbeing initiatives that impact on behaviours and environmental factors.	There has been collaboration between different levels of government and non-government organisations, including Aboriginal and research organisations, with some impact on risk factors.

Table 17 lists the indicators the evaluation framework included for this key action area and how they were measured for this report. Analysis of these indicators along with other data and literature has provided the evidence base for this section.

Table 17 | Evaluation indicators for key action area 2

Indicator name	Measure used	Type
Alcohol consumption	Per capita alcohol consumption per capita in NT	Quantitative
Overweight and obesity	BMI measurements for 0-15, 16-55 and 56+ age groups	Quantitative
Supportive environments	Consultation themes regarding alcohol, tobacco, food, physical activity and local liveability (healthy environment)	Qualitative
Prevalence of smoking	Smoking rates for people aged 14 years and over	Quantitative

6.3.1 Extent to which outputs in program logic have been realised

6.3.1.1 Population risk factors are reported on at the NT and national levels

Population risk factors are reported on in the NT Chronic Conditions Management Model reporting, the NT Aboriginal Health Key Performance Indicators (NT AHKPIs) and the national Key Performance Indicators (nKPIs)

Further information about risk factor indicators is included in Table 18 below. Note that this table focuses on KPIs relating to risk factor indicators only. Indicators relating to the detection and management of chronic conditions are discussed in Sections 6.4 and 6.6 respectively.

Risk factors are also reported on in the NT Department of the Attorney-General and Justice's report on NT wholesale alcohol supply and in national data collections such as the Australian Institute of Health and Welfare's (AIHWs) National Health Survey. Stakeholders in several locations commented that monitoring and reporting of risk factors is working well or improving, though some reports are less accessible to some stakeholders (such as policy teams).

Table 18 | KPIs that report on risk factors in the NT

KPI reports/sets	Description	Examples of KPIs for risk factors
Chronic Conditions Management Model reporting	Generates regular reports (also known as the 'Traffic Light Report') from Primary Care Information System (PCIS) data, including: <ul style="list-style-type: none"> a monthly list of recall items from clients' chronic conditions care plans quarterly traffic light reports, which provide a snapshot of indicators for the relevant community including chronic conditions rates six-monthly trend reports, which track indicators including follow-up of clients with chronic conditions.¹⁰² 	KPIs relating to: <ul style="list-style-type: none"> Smoking Cardiovascular risk assessment
NT AHKPIs ¹⁰³	Data is biannually collected and reported on by the NT Aboriginal Health Forum, in collaboration with the Department. Community reports are generated for individual communities and aggregated at a regional health service district area level. There was only one NT AHKPI report published for public consumption. Regular reports are distributed to health services, but not currently to policy makers.	KPIs relating to: <ul style="list-style-type: none"> Birthweight (for example, Number and proportion of Aboriginal babies born live to resident women and categorised as low, normal and high weight) Immunisation (for example, proportion of children aged 1 to <12 months and who received all age appropriate immunisations on time during the reporting period) Smoking (for example, number and proportion of Aboriginal clients aged 15 years and over whose smoking status has been recorded at the primary health care service)

¹⁰² NT Department of Health, Chronic Conditions Prevention and Management Strategy 2010-2020: Annual Report 2012-2013, 2016.

¹⁰³ NT Aboriginal Health Forum, Northern Territory NT AHKPI Report: Results from 2014, 2016.

<https://digitalibrary.health.nt.gov.au/prodjspu/bitstream/10137/1276/1/Northern%20Territory%20Aboriginal%20Health%20Key%20Performance%20Indicators%20Report%2c%202014.pdf>

- Cardiovascular risk (for example, number and proportion of resident Aboriginal clients aged 20 years and over who have had a cardiovascular risk assessment recorded within the previous 2 years and risk categorised)

nKPIs¹⁰⁴

Report on 24 specific quantitative indicators for process of care and health outcomes for Aboriginal and Torres Strait Islander people who regularly attend health services funded by the Australian Government.¹⁰⁵

KPIs relating to:

- Birthweight (for example, number and proportion of Indigenous babies born within the previous 12 months whose birthweight has been recorded)
- Immunisation (for example, number and proportion of Indigenous children who are fully immunised)
- Smoking (for example, number and proportion of regular clients whose smoking status has been recorded)
- Alcohol (for example, number and proportion of regular clients whose alcohol consumption status has been recorded)
- Overweight and obesity (for example, number and proportion of regular clients who are classified as overweight or obese)
- Cardiovascular risk (for example, number and proportion of regular clients who have had the necessary risk factors assessed to enable cardiovascular disease assessment)

Reporting on risk factors informs service delivery, planning and policy, though there is variation in its accessibility

The Chronic Conditions Management Model reports are provided to NT Government primary health care providers, including prisons.¹⁰⁶

NT AHKPI reports are provided to government and Aboriginal Community Controlled primary health care providers and fed back to communities through standardised reports.¹⁰⁷ Only one NT AHKPI report has been publicly released, which occurred in 2016.¹⁰⁸

The nKPIs are released publicly and used to monitor progress against the Council of Australian Governments (COAG) Closing the Gap targets, as well as supporting the national health goals in the

¹⁰⁴ AIHW, National Key Performance Indicators for Aboriginal and Torres Strait Islander Primary Health Care: Results to June 2018, updated 8 July 2019. <https://www.aihw.gov.au/reports/indigenous-australians/nkpi-indigenous-australians-health-care-2018/contents/nkpi-descriptions>

¹⁰⁵ Australian National Audit Office, Primary Healthcare Grants under the Indigenous Australians' Health Program, 2018 <https://www.anao.gov.au/work/performance-audit/primary-healthcare-grants-under-the-indigenous-australians-health-program>

¹⁰⁶ NT Department of Health, Submission to the Inquiry into Chronic Disease Prevention and Management in Primary Health Care, 2015.

¹⁰⁷ NT Department of Health, NT AHKPI, updated 7 Dec 2019.

<https://health.nt.gov.au/professionals/aboriginal-health-key-performance-indicator/nt-ahkpi-project-background>

¹⁰⁸ NT Aboriginal Health Forum, NT AHKPI Report: Results from 2014, 2016. <https://digitalibrary.health.nt.gov.au/prodjspsui/bitstream/10137/1276/1/Northern%20Territory%20Aboriginal%20Health%20Key%20Performance%20Indicators%20Report%2c%202014.pdf>

Implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan 2013–2023, some of which relate to risk factors.^{109,110}

Stakeholders demonstrated a widespread knowledge of the information from these sources, while also highlighting gaps in their accessibility. For example:

- Chronic condition risk factors are not always recorded for people in younger age groups. This is consistent with clinical guidelines (for example, cardiovascular risk assessment is for people 20 years and over, HBA1C and OGTT are not recommended for people under 18 years, BMI requires a specific calculation for children and adolescents). However, an identified trend toward earlier onset (for example, of type 2 diabetes) has created a need for some kind of reporting on chronic condition risk factors for younger age groups.
- Chronic condition risk factors reporting is not provided to health professionals in hospitals, policy teams in the Department, or the wide public.
- While nutrition and physical activity are reported through national-level data, they are not reported at the NT level.

6.3.1.2 Organisations have collaborated to produce healthy environments and address lifestyle risk factors

The Strategy identified various collaborative actions to produce healthy environments and address lifestyle risk factors that were subsequently undertaken (examples of which are shown in Table 19).

Table 19 | Examples of collaborative actions to promote healthy environments and address lifestyle risk factors

Risk factor	Action	Examples of initiatives included
Alcohol consumption	Enough is Enough Alcohol Reform Package (2011) (disbanded in 2012, re-established in 2017) ¹¹¹	<ul style="list-style-type: none"> • Banned Drinking Register (BDR). • Compulsory treatment for problem drinkers. • Banning Alcohol and Treatment (BAT) notices that prohibit individuals from purchasing, possessing or consuming alcohol for a specified period.

¹⁰⁹ AIHW, National Key Performance Indicators for Aboriginal and Torres Strait Islander Primary Health Care: Results to June 2018, updated 8 July 2019. <https://www.aihw.gov.au/reports/indigenous-australians/nkpi-indigenous-australians-health-care-2018/contents/nkpi-descriptions>

¹¹⁰ Department of Health, Implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan 2013–2023, Australian Government, Canberra, 2015. [https://www1.health.gov.au/internet/main/publishing.nsf/Content/AC51639D3C8CD4ECCA257E8B00007AC5/\\$File/DOH_ImplementationPlan_v3.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/AC51639D3C8CD4ECCA257E8B00007AC5/$File/DOH_ImplementationPlan_v3.pdf)

¹¹¹ NT Government, Alcohol Policies and Legislation Review: Final Report, 2017. https://alcoholreform.nt.gov.au/_data/assets/pdf_file/0005/453497/Alcohol-Policies-and-Legislation-Review-Final-Report.pdf

Tobacco smoking	NT Tobacco Action Plan 2010-2013 ¹¹²	<ul style="list-style-type: none"> • Establish a Tobacco Control Advisory Committee to oversee the implementation of the Tobacco Action Plan. This includes representatives from Aboriginal community organisations, research institutes, government departments and NGOs. • Form an alliance between advocacy groups and all levels of government to support increases of tobacco taxes and prices by the Australian Government. • Ensuring access to tobacco prevention and cessation treatments. • Raising awareness of the impacts of tobacco use. • Strengthening tobacco control legislation including regulating tobacco advertising, pricing and taxing, increasing smoke-free areas.
	NT Tobacco Action Plan 2019-2023 ¹¹³	<ul style="list-style-type: none"> • Promoting efforts from stakeholders across sectors and settings and within population and communities. • Implementing media campaigns and promoting positive role models. • Increasing smoke free spaces; for example, homes, workplaces and public settings. • Sustaining quit attempts and preventing relapse. • Targeting priority populations; for example, pregnant women, young people, people with mental illness, people released from NT prisons. • Monitoring and regulating e-cigarette products in the same way as normal tobacco products, including through reducing children's exposure to marketing. The NT was the first jurisdiction in Australia to implement a minimum age of at least 18 years of age for a person to be able to sell tobacco and electronic cigarettes.

¹¹² NT Department of Health and Families, NT Tobacco Action Plan 2010-2013, 2008

<https://digitallibrary.health.nt.gov.au/prodjspui/bitstream/10137/443/3/NT%20tobacco%20action%20plan%202010-2013.pdf>

¹¹³ NT Department of Health, NT Tobacco Action Plan 2019-2023, 2019

<https://digitallibrary.health.nt.gov.au/prodjspui/bitstream/10137/7581/3/Tobacco%20action%20plan.pdf>

Nutrition and physical activity	NT Health Nutrition and Physical Activity Strategy 2015–2020 ¹¹⁴	<ul style="list-style-type: none"> • Collaborating on Menzies School of Health Research Store Measures Tool using the Ps of marketing such as Placement, Promotion and Product. • NT Health Service Food supply project focusing on Stores and Takeaways, Schools and School Nutrition Programs, Aged Care/ Meals on Wheels and Childcare. • Development of resources and guiding practice related to diabetes in pregnancy. • Funded Childhood Obesity Prevention and Lifestyle, Palmerston NT COPAL partners include Australian Government and Palmerston City Council. • Childhood Obesity project: development of resources and practices to assist practitioners in managing childhood obesity. • Child Health Project: development of resources and practices to manage 0-2 year-old clients with growth problems and/or anaemia care plans. • Nutrition and Healthy Eating policy with the Department of Education. • Funded Heart Foundation NT to deliver the LiveLighter Campaign in the NT – sugary drinks campaign and visceral or toxic fat. • Funded Healthy Living NT to conduct Healthy Territory Kids. • Support, promote and protect breastfeeding through development of the NT Wide Breastfeeding Policy and contribution on the National Breastfeeding Strategy. • NT Health Healthy Choices Made Easy (HCME) Policy – Healthy food and drink policy for staff, visitors and volunteers to NT Health facilities.
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The Tackling Indigenous Smoking program is an example of a government-run program which has achieved outcomes in reducing risk factors. This is detailed in Figure 18 below.

¹¹⁴ NT Department of Health, NT Health Nutrition and Physical Activity Strategy 2015-2020, 2016
<https://digitallibrary.health.nt.gov.au/prodjspuu/bitstream/10137/672/1/NT%20Health%20Nutrition%20and%20Physical%20Activity%20Strategy%202015%20-%202020.pdf>

Figure 18 | Case study: The Tackling Indigenous Smoking program

The Tackling Indigenous Smoking (TIS) program aims to reduce the prevalence of tobacco smoking in Aboriginal communities. It takes a local and population-based approach, educating communities and supporting health services to deliver smoking interventions which are culturally appropriate. This works alongside other public health measures to reduce smoking, such as taxes on tobacco and plain packaging. It is distinctive among targeted prevention programs as it has a well-funded, dedicated team of workers based in communities.

The initial scope of the TIS program included a Healthy Lifestyle component alongside specific work on smoking, including improving nutrition and increasing physical exercise.¹¹⁵ Following a review of the program in 2014, the TIS program was adjusted to focus on smoking over broader lifestyle activities, with over \$116 million committed by the Australian Government over three years. There are several aspects to the adjusted program,¹¹⁶ including:

- **Regional tobacco control grants:** made to organisations across Australia to perform interventions with flexibility to choose the most appropriate evidence-based approaches for their local contexts.
- **National Best Practice Unit Tackling Indigenous Smoking (NBPU TIS):** this is a body which supports funded organisations.
- **Improvements to Quitline:** this involves building the accessibility and appropriateness of Quitline services for Aboriginal people.
- **Quitskills training:** this consists of training for frontline community and health workers.
- **National Coordinator:** this is a role providing advice on policies and supporting funded organisations.
- **Priority group activities:** these focus on high-priority groups such as pregnant women and smokers in remote areas.
- **Evaluations and research:** these are regular assessments of the effectiveness of the TIS program to ensure best practice and evidence-based activities, and the impacts and outcomes of grants.

An evaluation of the program found that it had met its short-term outcomes, including program implementation, building community engagement and awareness, partnerships, and improving access to information and evidence for what works to reduce smoking. The evaluation also found that its place-based and flexible approach is appropriate to reduce the high prevalence of smoking among Aboriginal people. The program's efficacy takes place against a backdrop of broader system-level policies and programs designed to reduce smoking, such as the regularly increasing excise tax on tobacco, and mass marketing campaigns to raise awareness and change behaviour.

There have been several challenges experienced by the program. Firstly, competing community priorities and a lack of buy-in from senior managers in some regions delayed the implementation of some program activities. Secondly, a lack of funding certainty due to the funding cycle impacted on longer term planning and staff retention, in some cases leading to underspend of funding. Thirdly, some grant recipients struggled with measuring the impact of health promotion such as behaviour change. Finally, there was some confusion in governance and communication around funding parameters and the roles of various stakeholders in the program. One example is the question of whether TIS teams should focus only on population-level work, against the perception that TIS teams working in remote Aboriginal communities are more effective if they also provide direct support to some individuals and families to stop smoking.

Following the program's evaluation, the Australian Government announced its ongoing support for the TIS program in February 2018, committing over \$180 million until 2021-2022.

¹¹⁵ Upton et al., Tackling Indigenous Smoking and Healthy Lifestyle Programme Review (Executive Summary), November 2014, p1.

¹¹⁶ Australian Department of Health website, 'Tackling Indigenous Smoking', accessed 1 Mar 2020

<https://www.health.gov.au/initiatives-and-programs/tackling-indigenous-smoking>

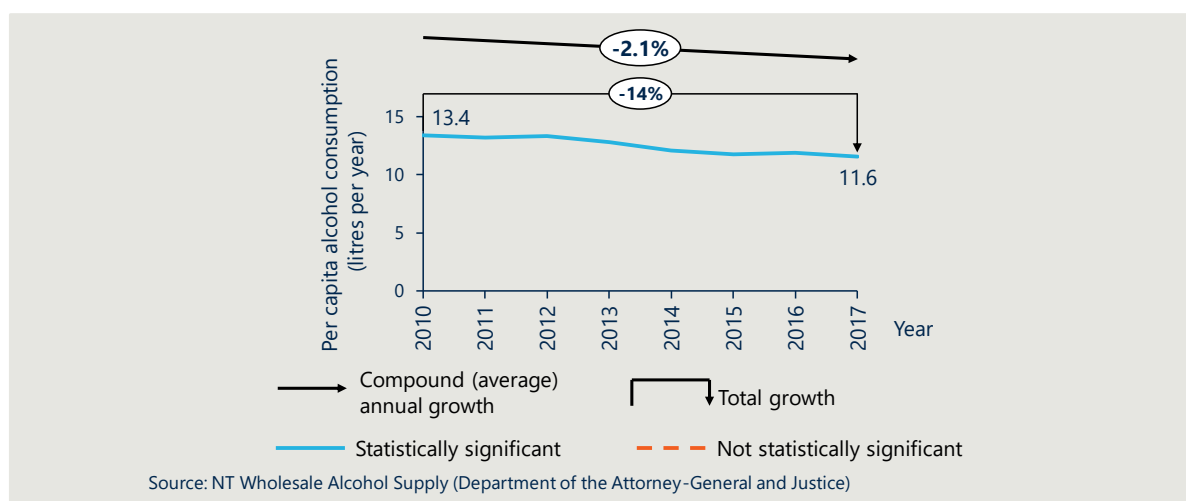
6.3.2 Extent to which outcome in program logic has been achieved

6.3.2.1 There have been improvements in some behaviours and environmental factors, though this has varied between locations

There has been a reduction in alcohol consumption

From 2010 to 2017, there was a statistically significant 14 per cent decrease in the volume of alcohol consumed in the NT (from 13.4 to 11.6 litres per capita per year) as shown in Figure 19. Stakeholders attributed the reduction in alcohol consumption to reforms identified as preventative actions in the Strategy (such as the BDR and alcohol restrictions in certain locations such as Tennant Creek). Most did not directly associate these with the Strategy. Other activities which were thought to contribute include an increased alcohol and other drug workforce in remote communities and inclusion of alcohol education in school curriculum.

Figure 19 | Per capita alcohol consumption, 2010-2017, NT



Some stakeholders identified benefits from the alcohol restrictions, including a reduction in the amount of emergency department presentations for alcohol intoxication. This is consistent with recent data from the 2019 update on the Alcohol and Harm Minimisation Action Plan, which showed an overall 24.5 per cent reduction in the total number of alcohol attributable emergency department presentations in NT hospitals in December 2018 (following the introduction of the plan) compared to December 2017.¹¹⁷

Some stakeholders identified unintended consequences of supply reduction measures, such as black markets, consumption being displaced to other locations, and individuals being pressured into purchasing alcohol on behalf of others. Consistent with this:

- An NT Government submission to an Australian Government "inquiry into the harmful use of alcohol in Aboriginal and Torres Strait Islander communities" reported that alcohol restrictions within communities may displace problem drinkers to 'drinking camps', which may be in unsafe locations and at a distance from families and support services.¹¹⁸

¹¹⁷ NT Government, NT Alcohol Harm Minimisation Action Plan 2018-2019: February 2019 update, 2019 https://alcoholreform.nt.gov.au/_data/assets/pdf_file/0007/658186/action-plan-alcohol-harm.pdf

¹¹⁸ NT Department of Health, Submission to the Inquiry into Chronic Disease Prevention and Management in Primary Health Care, 2015.

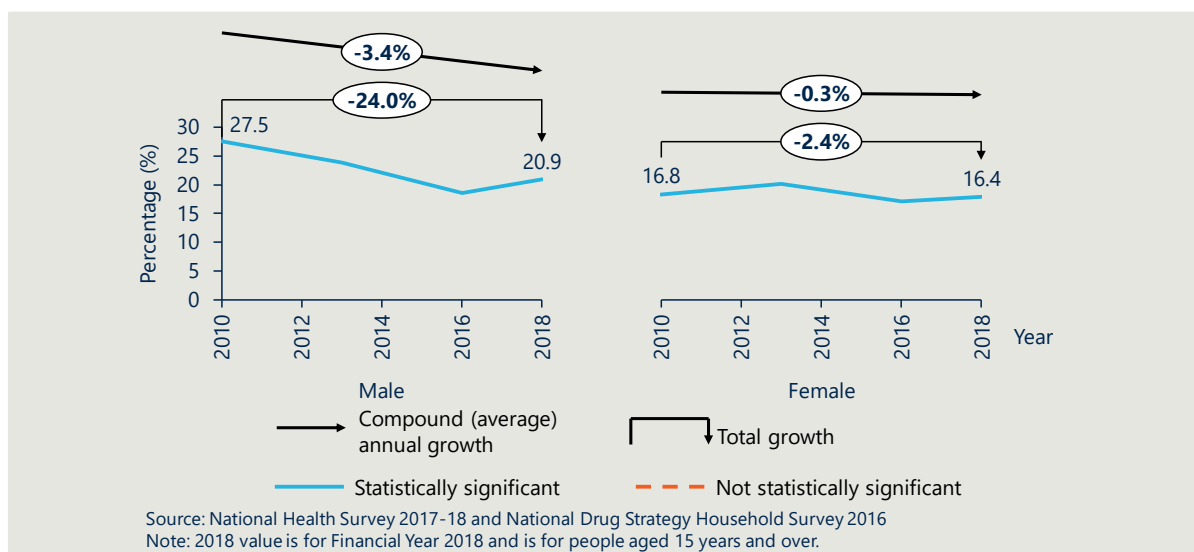
- An evaluation of the BDR confirmed that there is evidence of family purchasing alcohol for those on the register. It was not stated whether family members were being pressured to do so.¹¹⁹

However, there was insufficient evidence to assess how systematic these issues are in the NT as part of this evaluation.

There is evidence of a reduction in tobacco consumption, but this may not extend to remote communities

From 2010 to 2018, there were statistically significant decreases in the percentage of people aged 14 years or older who were daily smokers (as shown in Figure 20). For men, there was a 24 per cent reduction in the percentage of daily smokers (from 27.5 to 20.9 per cent). Comparatively for women, there was a smaller 2.4 per cent reduction in the percentage of daily smokers (from 16.8 to 16.4 per cent).

Figure 20 | Percentage of people aged 14 years and over who are daily smokers, by gender, 2010-2018, NT



Stakeholders commonly attributed the decline in tobacco smoking to tobacco taxation. While most stakeholders referred to the benefits of reducing the affordability of tobacco through taxation, some raised concerns about the effect on consumers who continue to smoke; for example, worsening of existing financial stress and ability to afford basics such as food. Some also attribute the decline to reforms identified as preventative actions in the Strategy (such as smoke free spaces). Most did not associate these activities with the Strategy.

Several stakeholders said the NT Government performs poorly on tobacco control measures relative to other jurisdictions. For example, it was asserted that the NT Government underinvests in measures such as public education campaigns relative to other jurisdictions. This was consistent with the mid-term evaluation, which found that “a great deal of concern was expressed about the lack of resources directed toward smoking cessation by the NT Government, and whether the funds available are being used effectively.”¹²⁰

¹¹⁹ Smith, J, Twelve-month evaluation of the Banned Drinker Register in the NT: Part 1 – Descriptive Analysis of Administrative Data, 2018, <https://digitallibrary.health.nt.gov.au/prod/jspui/bitstream/10137/7236/1/Twelve-month%20evaluation%20of%20the%20Banned%20Drinker%20Register%20in%20the%20Northern%20Territory%20-%20Part%201%2C%20Descriptive%20analysis%20of%20administrative%20data.pdf>

¹²⁰ Menzies School of Health Research, mid-term evaluation: Chronic Conditions Prevention and Management Strategy 2010-2020, 2016.

While the quantitative data suggests a decline in the prevalence of daily smoking in the NT, stakeholders generally believed smoking rates had declined far less, if at all, in remote communities. For example, stakeholders in Arnhem Land suggested that there had been a negligible reduction in tobacco smoking in the local Yolngu people, among whom smoking is culturally ingrained. This anecdotal evidence is supported by data from the Australian Bureau of Statistics, which showed that smoking rates for Aboriginal and Torres Strait Islander people in remote areas changed little between 2004-05 and 2018-19, even as those in non-remote areas steadily declined.¹²¹

Rates of adult obesity appear to have reduced

From 2010 to 2018 (as shown in Figure 21):

- There were increases in the percentage of people aged 0-15 years who were overweight or obese in both the Top End (of 6 per cent, from 4.7 to 7.6 per cent) and Central Australia (of 2.8 per cent, from 11.3 to 14.0 per cent).
- There were decreases in the percentage of people aged 16-55 who were overweight or obese in both the Top End (of 2.1 per cent, from 55.4 to 46.6 per cent) and Central Australia (of 0.5 per cent, from 77.6 to 74.6 per cent).
- There were also decreases in the percentage of people aged 56+ who were overweight or obese in the Top End (of 2.7 per cent, from 59.6 to 47.8 per cent) and Central Australia (of 0.9 per cent, from 74.6 to 69.2 per cent).

Statistical significance was not calculated for this indicator, as there were doubts about the extent to which the data was representative of the NT population for two reasons. First, data was only available from PCIS, which is limited to people accessing government-run remote primary health care services and prisons; data was not available for other health services. Second, such data could also be affected by any factors that influence whether a health professional measures the weight of a client. For example, a BMI measurement might be more likely to be taken for clients who look underweight, overweight or obese, resulting in the stated proportion of overweight or obese clients being higher than it actually is due to a biased sample.¹²² The mix of people being measured could also be affected by factors such as increasing numbers of health checks across the whole population (see Section 6.4).

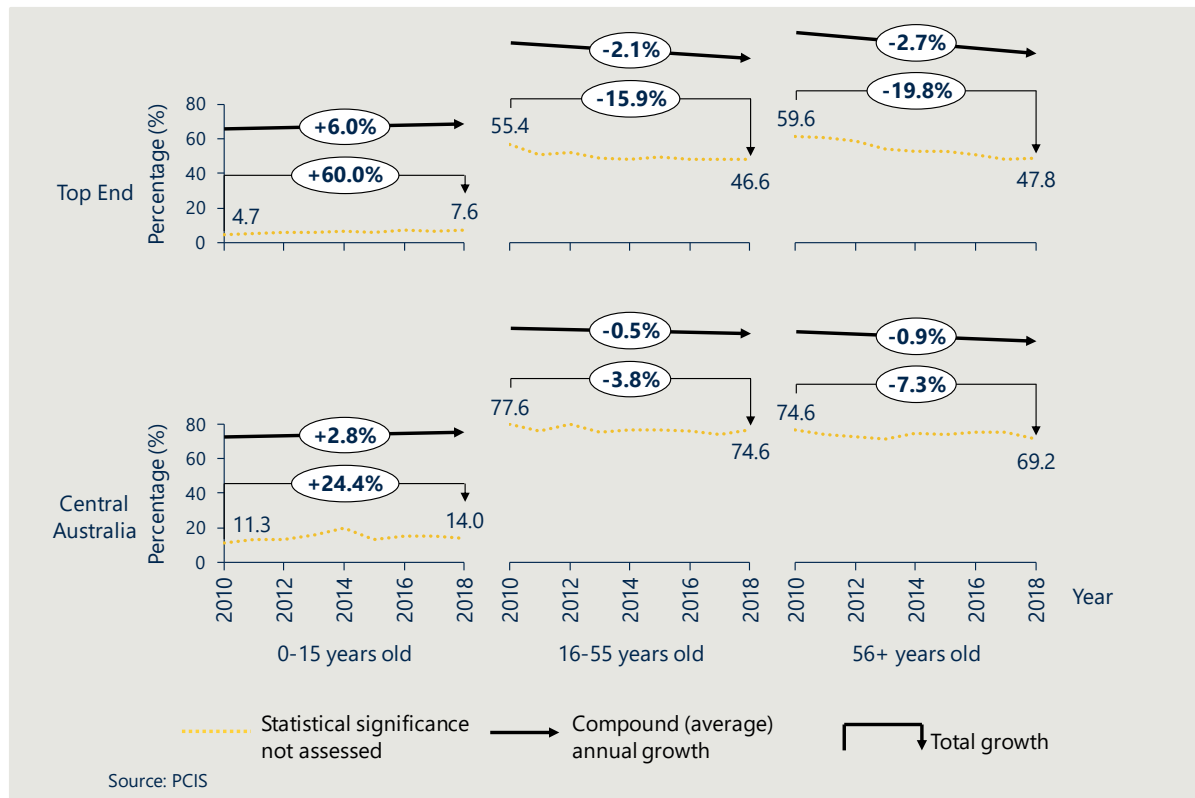
Stakeholders from outside the health sector highlighted the role of schools in teaching students about nutrition and exercise (as well as alcohol and tobacco). An example of collaboration with education as noted in Table 19, is the monitoring and review of the NT Schools' Canteen, Nutrition and Healthy Eating Policy. This is one of the initiatives in place with the objective of promoting and supporting healthy eating and regular participation in physical activity among school aged children.¹²³

¹²¹ Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander Health Survey, 2018-19, updated 11 Dec 2019 <https://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4715.0Main%20Features152018-19?opendocument&tabname=Summary&prodno=4715.0&issue=2018-19&num=&view=>

¹²² Australian Institute of Health and Welfare, National Key Performance Indicators for Aboriginal and Torres Strait Islander Primary Health Care: Results to June 2018, 2019 <https://www.aihw.gov.au/reports/indigenous-australians/nkpi-indigenous-australians-health-care-2018/contents/preventative-health-indicators/bmi-classified-as-overweight-or-obese>

¹²³ NT Department of Health, NT Health Nutrition and Physical Activity Strategy 2015-2020, 2016 <https://digitallibrary.health.nt.gov.au/prodjspsui/bitstream/10137/672/1/NT%20Health%20Nutrition%20and%20Physical%20Activity%20Strategy%202015%20-%202020.pdf>

Figure 21 | Percentage of people who are overweight or obese, by age group and health service, 2010-2018, NT



6.3.3 Extent to which assumption in program logic has been substantiated

6.3.3.1 There has been collaboration between government and other organisations to improve health and wellbeing

The program logic made the following assumption for this key action area: “Other government and non-government organisations collaborate on sustained health and wellbeing initiatives that impact on behaviours and environmental factors.” This assumption has been substantiated by the evidence available: there has been collaboration on health and wellbeing initiatives in the NT between government agencies (both in the NT and Australian Governments), with the Aboriginal Community Controlled Health sector, and with other organisations such as NGOs and research institutions. Some improvements in risk factors have been achieved, such as lower rates of tobacco smoking and reductions in obesity in some age groups. However, many risk factors continue to present challenges, and ongoing collaboration will be needed to address them in future.

6.4 Key action area 3: Early detection and secondary prevention

Key action area 3 focuses on early detection and secondary prevention. The program logic specified the following outputs, outcome and assumption for this key action area:

- **Output 1:** Recording and reporting of risk factors and interventions is established.
- **Output 2:** The uptake of adult health checks has increased over the last ten years.
- **Output 3:** Action on early detection and secondary prevention of chronic conditions markers has increased.

- **Outcome:** Progression and early onset of chronic conditions are delayed or stopped.
- **Assumption:** Health service providers have the capability and systems that identify, monitor and act on early detection and management of disease markers.

This section presents findings about the extent to which these were observed in practice. These findings are summarised in Table 20 below.

Table 20 | Performance of the Strategy in key action area 3

Element of program logic		Finding
Output	Recording and reporting of risk factors and interventions established.	Chronic conditions risk factors and interventions are recorded and reported on through the Chronic Conditions Management Model reporting, NT AHKPIs, nKPIs, and TEHS and CAHS Service Delivery Agreement KPIs.
	The uptake of Adult Health Checks has increased over the last ten years.	There have been large increases in uptake for all types of health checks (including those with MBS item numbers 701, 703, 705, 707 and 715) over the past ten years.
	Action on early detection and secondary prevention of chronic conditions markers has increased.	Stakeholders report action on early detection and secondary prevention has increased. The trends in uptake of health checks support this. However, trends in participation in the national cancer screening programs (breast, cervical and bowel) have varied.
Outcome	Progression and early onset of chronic conditions are delayed or stopped.	Data on rates of potentially preventable hospitalisations suggests the effectiveness of primary health care in preventing and managing chronic conditions improved in the NT relative to Australia as a whole. It also suggests that the effectiveness of primary health care in preventing and managing chronic conditions remains higher in the Top End than in Central Australia.
Assumption	Health service providers have the capability and systems that identify, monitor and act on early detection and management of disease markers.	There is evidence of improvement in the ability of health service providers to identify, monitor and act on disease markers. Stakeholder had doubts about the consistency with which detection of conditions translates into management.

Table 21 lists the indicators the evaluation framework included for this key action area and how they were measured for this report. Analysis of these indicators along with other data and literature has provided the evidence base for this section.

Table 21 | Evaluation indicators for key action area 3

Indicator name	Measure used	Type
Health checks	Number of health checks (MBS item numbers 701, 703, 705, 707 and 715)	Quantitative
	Number of health checks for Aboriginal and Torres Strait Islander people (MBS item number 715) per 100,000 population	
Cancer screening	Screening rates of for cervical, breast and bowel cancer	Quantitative

Potentially preventable hospitalisations due to chronic conditions	Rate of potentially preventable hospitalisations due to chronic conditions Rate of all hospitalisations due to chronic conditions (including by chronic condition group)	Quantitative
Health professional knowledge in early detection	Data was unable to be obtained for this indicator	Quantitative

6.4.1 Extent to which outputs in program logic have been realised

6.4.1.1 Chronic conditions risk factors and interventions are recorded and reported on

Table 18 in Section 6.3 described how chronic conditions risk factors are recorded and reported through the Chronic Conditions Management Model reporting, the NT AHKPIs and the nKPIs. These KPIs also include indicators for early detection and secondary detection (as shown in Table 22).

The TEHS and CAHS Service Delivery Agreements also define a set of KPIs (with those relating to early detection and secondary prevention shown in Table 22)^{124,125}. Performance is assessed against the KPIs, in addition to progress reports on the implementation of various strategies, including the Strategy on which this evaluation focuses.

Table 22 | KPIs for early detection and secondary prevention

KPI report/set	Examples of KPIs for early detection and secondary prevention
Chronic Conditions Management Model reporting	KPIs relating to the cardiovascular risk management journey
NT AHKPIs	KPIs relating to: <ul style="list-style-type: none"> Health checks (for example, number of resident clients aged 15 years to <55 years with a completed MBS Aboriginal health assessment or alternative Aboriginal adult health check) Cancer screening (for example, number and proportion of resident women aged 20 to 69 years who have had one Pap test during the previous 2, 3 and 5 years reporting periods) Kidney disease screening (for example, number and proportion of Aboriginal residents aged 31 years and over screened for renal disease according to the CARPA guidelines during a two year period and proportion of results suggestive of kidney disease)
nKPIs	KPIs relating to: <ul style="list-style-type: none"> Health checks (for example, number and proportion of regular clients for whom an MBS Health Assessment for Aboriginal and Torres Strait Islander People was claimed) Cancer screening (for example, number and proportion of regular clients who have had a cervical screening)

¹²⁴ NT Department of Health. TEHS Service Delivery Agreement 2019-20
<https://digitalibrary.health.nt.gov.au/prodjspsui/bitstream/10137/7742/1/TEHS%20Service%20Delivery%20Agreement%202019%20to%202020.pdf>

¹²⁵ NT Department of Health. CAHS Service Delivery Agreement 2019-20
<https://digitalibrary.health.nt.gov.au/prodjspsui/bitstream/10137/7740/1/CAHS%20SDA%202019%20to%202020%20Service%20Delivery%20Agreement.pdf>

6.4.1.2 There have been large increases in uptake of health checks over the past ten years

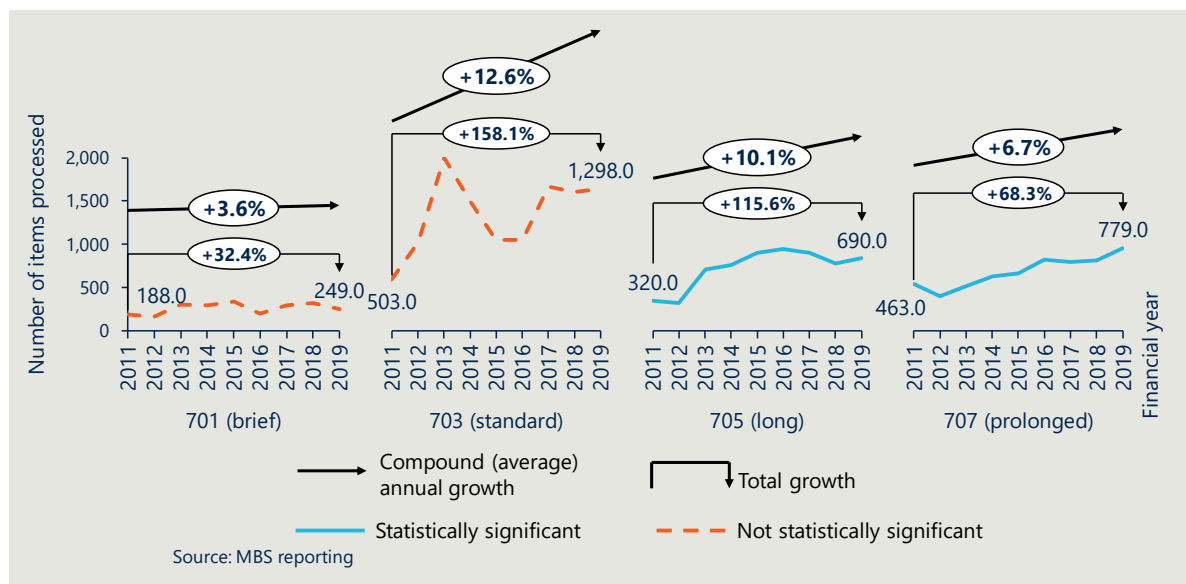
Health checks provide an opportunity for early detection and treatment of chronic conditions. During a health check, a health professional assesses a person’s physical, social and emotional wellbeing, which informs subsequent provision of information, advice, care and, if necessary, referral.¹²⁶

From 2011 to 2019, there were large increases in all types of health checks, including:

- a non-statistically significant increase in brief consultation health assessments (MBS item 701) of 32 per cent (from 188 to 249 items processed)
- a non-statistically significant increase in standard consultation health assessments (MBS item 703) of 158 per cent (from 503 to 1,298 items processed)
- a statistically significant increase in long consultation health assessments (MBS item 705) of 115 per cent (from 320 to 690 items processed)
- a statistically significant increase in prolonged consultation health assessments (MBS item 707) of 68 per cent (from 463 to 779 items processed)
- a statistically significant increase in Aboriginal and Torres Strait Islander Peoples health assessments (MBS item 715) for both men (of 107 per cent, from 4,922 to 10,196 items processed per 100,000 population) and women (of 117 per cent, from 5,713 to 12,406 per 100,000).

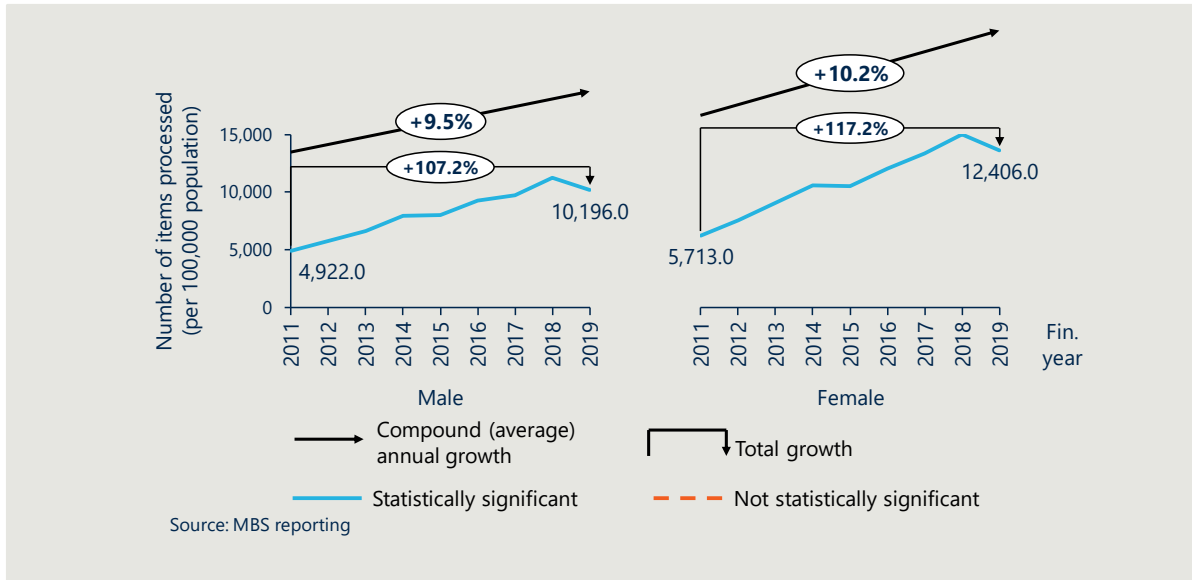
The increases for MBS items 701, 703, 705 and 707 are shown in in Figure 22; those for MBS item 715 are shown in Figure 23.

Figure 22 | Number of health checks, by MBS item number, 2011-2019 (financial years), NT



¹²⁶ AIHW, Indigenous health checks and follow-ups, updated 24 Jun 2019 <https://www.aihw.gov.au/reports/indigenous-australians/indigenous-health-checks-follow-ups/contents/overview>

Figure 23 | Rate of health checks for Aboriginal and Torres Strait Islander people (MBS item 715), by gender, 2011-2019 (financial years), NT



Stakeholders attributed the increase in health checks to efforts on the part of health service providers to increase MBS funding and meet KPIs (some of which influence funding). However, there is evidence that increases in MBS funding and KPI achievement can result from efforts to improve quality, accessibility and continuity of care (as discussed in the case study in Figure 24).

Many stakeholders were skeptical about the benefits of health checks for consumers' health outcomes. A commonly cited concern was that there is insufficient workforce capacity to provide continuity of care following detection. Specifically, despite screening assessments occurring, abnormal results were not adequately followed up and therefore secondary prevention could not take place.

However, other stakeholders viewed them as beneficial. This is consistent with studies demonstrating that adult health checks can be effective at detecting chronic disease risk factors, diagnosing new conditions and implementing preventative care.^{127,128}

¹²⁷ Spurling, G. K., Hayman, N. E., & Cooney, A. L. (2009). Adult health checks for Indigenous Australians: the first years' experience from the Inala Indigenous Health Service. *Medical journal of Australia*, 190(10), 562-564.

¹²⁸ Mayers, N. R., & Couzos, S. (2004). Towards health equity through an adult health check for Aboriginal and Torres Strait Islander people. *The Medical Journal of Australia*, 181(10), 531-532.

Figure 24 | Case study: Improving service delivery with a more decentralised footprint

Central Australian Aboriginal Congress (Congress) is the largest ACCHO in the NT, providing primary health care services in Alice Springs and six remote communities in Central Australia. In its Alice Springs clinic, performance against KPIs had plateaued and population coverage was lower than in its smaller remote clinics. The organisation concluded the clinic had grown so large that continuity of care had been lost, with 80 per cent of clients seeing a different practitioner at every consultation, and innovation and change management had become more difficult.

To address this problem, Congress established two smaller primary health care clinics in the suburbs of Alice Springs to increase holistic multidisciplinary, team-based care on each occasion of service and improve continuity of care. Workforce capacity was strengthened by employing local Aboriginal people in care coordination roles and providing consistent local staffing to build relationships with clients.

In addition to positive community feedback, outcomes of the decentralised service delivery included:

- increased health checks, care plans and annual cycles of care performed on the day of service (48 per cent increase in health checks over the 2016-17 financial year)
- increased continuity of care (more than 70 per cent of the clients now see the same general practitioner (GP) on an ongoing basis)
- increased MBS revenue (29 per cent increase over 2016-17 financial year).

By maximising MBS claims, Congress was able to reinvest the funding into additional, comprehensive primary health care activities for the health and wellbeing of the community.^{129,130}

6.4.1.3 Stakeholders generally agreed action on early detection has increased, however, screening rates for cancer have decreased

Stakeholders generally agreed the NT had performed well in early detection and secondary prevention

This was evident among survey respondents:

- 54 per cent of respondents said the NT was performing well in increasing early detection and secondary prevention of chronic conditions, compared to only 24 per cent who thought the NT was performing poorly.
- 68 per cent of respondents said things were getting better in this area, compared to only 15 per cent who thought they were getting worse.

By these two indicators, which were measured for every key action areas, this was the key action area about which survey respondents were most positive. Interview and focus group participants expressed similar views.

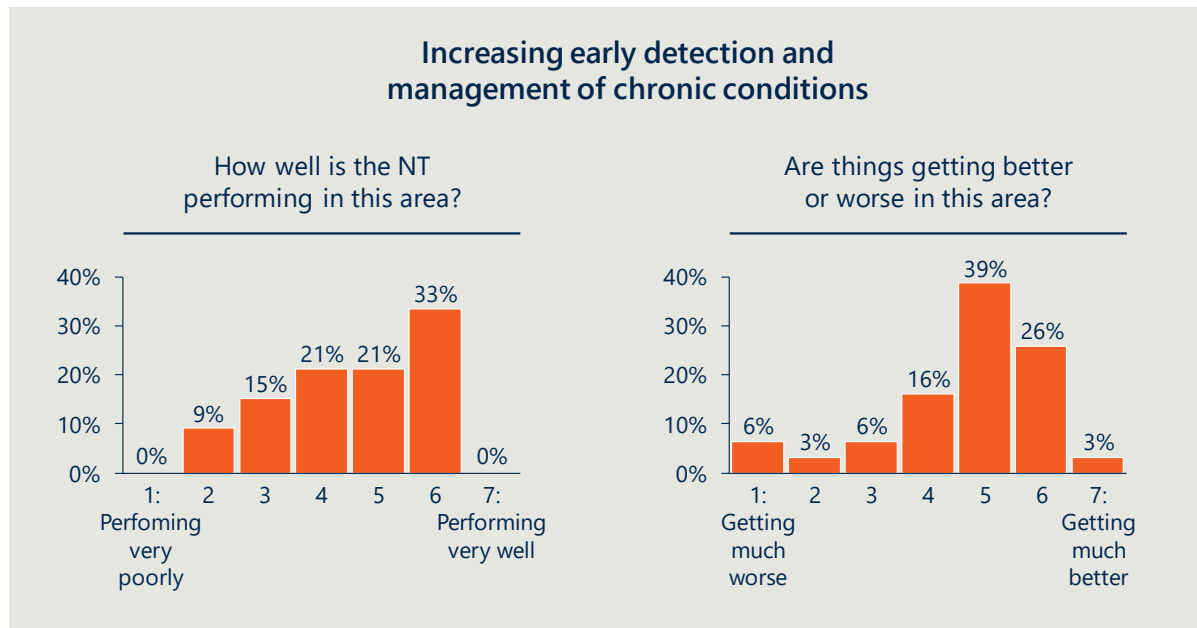
Examples of good performance in this area identified in the consultations included uptake of health checks, greater emphasis on screening, monitoring and reporting of risk factors, and more training being offered to health professionals (for example, through conferences and the introduction of e-learning).

¹²⁹ Schmidt, B., Smith, J. D., & Battye, K, Best practice primary and secondary preventative interventions in chronic disease in remote Australia, 2018

https://pure.bond.edu.au/ws/portalfiles/portal/27161929/Best_practice_primary_and_secondary_preventative_interventions_in_chronic_disease_in_remote_Aust.pdf

¹³⁰ Central Australian Aboriginal Congress, Central Australian Aboriginal Congress 2016-2017 Annual Report, retrieved 18 Mar 2020 https://www.caac.org.au/uploads/pdfs/2016-17_Congress_Annual_Report_web.pdf

Table 23 | Survey results regarding early detection and management of chronic conditions



A case study on improving services for women with diabetes in pregnancy is shown in Figure 25 below, as an example of improvements in awareness and early detection.

Figure 25 | Case study: Improving health systems and services for women with diabetes in pregnancy and their children through early detection and secondary prevention of diabetes

Diabetes rates are rising in Aboriginal communities, including type 2 diabetes in children and young people. A major factor contributing to this is the increasing numbers of NT women with diabetes in pregnancy, as a child's exposure to diabetes in utero increases the risk of early-onset diabetes in the child, leading to intergenerational diabetes, which is also seen in other Indigenous populations around the world.¹³¹

To address this, a partnership was formalised in 2012 with funding from the NHMRC (now called the Diabetes Across the Lifecourse: Northern Australia Partnership).¹³² The Partnership is led by Menzies School of Health Research, with other partners being the NT Department of Health, AMSANT, Healthy Living NT, and the Baker Heart and Diabetes Institute. The aim of the partnership includes to improve models of care for pregnant women with diabetes. This included providing education for clinicians and primary care health workers about the prevalence of diabetes during pregnancy and its effects, as its prevalence was not as high in earlier years when many staff members were trained. Another component was bringing diverse service providers together to overcome silos and improve care through a CQI approach. This involved primary health and hospital staff, including midwives, diabetes educators, GPs, AHPs, public health physicians, obstetricians, and endocrinologists. Specific activities of the partnership include establishing the NT Diabetes in Pregnancy Clinical Register, enhancing models of care for women with diabetes in pregnancy, and conducting a longitudinal birth cohort study to assess short and long-term pregnancy outcomes.¹³³

This partnership has had significant benefits, as reported by stakeholders:

- Within the first two years, there was a reported increase in rates of gestational diabetes among NT Aboriginal women of 80 per cent, which was driven by improved awareness, screening and reporting by health professionals, enabling faster diagnosis and management.¹³⁴
- The gap between guidelines and practice has been reducing, with documented earlier screening for diabetes in pregnancy as per recommended practice.¹³⁵
- There is preliminary evidence for a reduction in large babies in mothers with type 2 diabetes, which helps reduce the children's risk of diabetes and obesity over their life course.¹³⁶

The partnership received further funding in 2015 to develop an alliance with Far North Queensland and collaboration with Canadian researchers, and in 2019 the partnership expanded to include a focus on diabetes prevention in children and youth with type 2 diabetes. It has a Clinical Reference Group which meets annually and an Indigenous Reference Group which meets three times a year.

There was a decrease in breast cancer screening rates for most population groups

From 2011 to 2017, there was a statistically significant decrease in breast cancer screening rates for Aboriginal and non-Aboriginal women in Central Australia (as shown in Figure 26):

- For Aboriginal women, there was a 15 per cent reduction (from 30.3 to 25.8 per cent) in the proportion who participated in breast cancer screening.
- For non-Aboriginal women, there was a 10 per cent reduction (from 43.9 to 39.5 per cent) in the proportion who participated in breast cancer screening.

¹³¹ Maple-Brown LJ and Hampton D, 'Indigenous cultures in countries with similar colonisation histories share the challenge of intergenerational diabetes', *The Lancet Global Health*, 2020 8(5), p619.

¹³² Diabetes across the Lifecourse: Northern Australia Partnership website, accessed 1 Mar 2020 <https://dipp.org.au/>

¹³³ Diabetes across the Lifecourse: Northern Australia Partnership website, accessed 1 Mar 2020 <https://dipp.org.au/diabetes-in-pregnancy-partnership/>

¹³⁴ Kirkham et al, 'Implementation of a Diabetes in Pregnancy Clinical Register in a complex setting: findings from a process evaluation', *PLoS One*, 2017, 12(8) <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0179487>

¹³⁵ (1) Kirkham et al., 'Implementation of a Diabetes in Pregnancy Clinical Register in a complex setting: findings from a process evaluation', *PLoS One*, 2017, 12(8) <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0179487> (2) Kirkham et al., 'Health services changes to address diabetes in pregnancy in a complex setting: perspectives of health professionals'. *BMC Health Services*, 2017. 17(1):524 <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-017-2478-7>

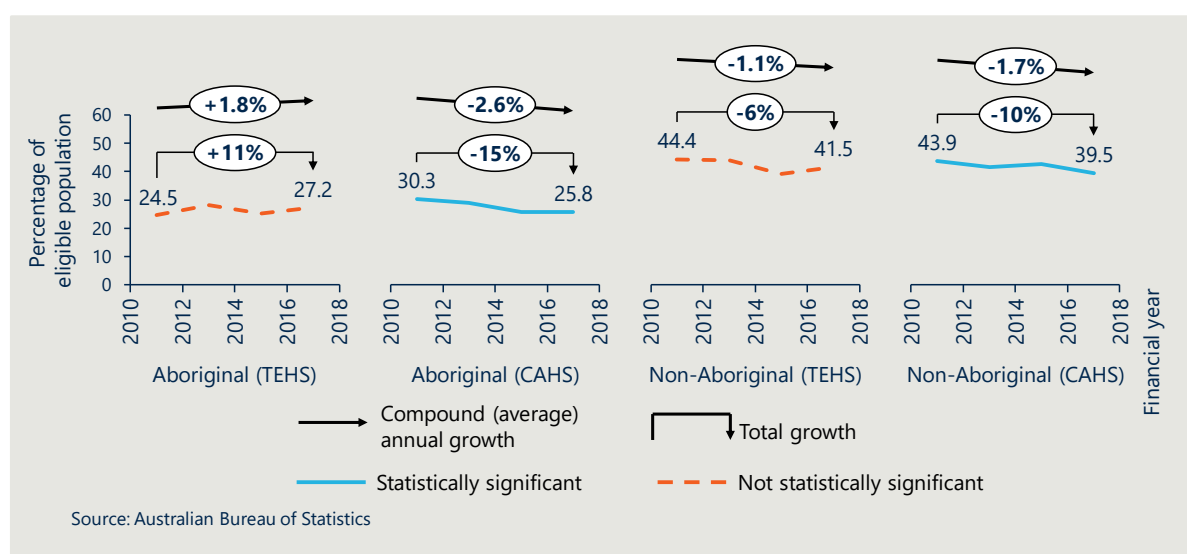
¹³⁶ Diabetes across the Lifecourse: Northern Australia Partnership website, 'Northern Territory Diabetes in Pregnancy Clinical Register: Summary of Key Findings for NT: October 2011 to December 2018' <http://dipp.org.au/wp-content/uploads/NT-Key-Findings-Report-Diabetes-in-Pregnancy-2011-2018.pdf> and for January to December 2018 <http://dipp.org.au/wp-content/uploads/NT-Key-Findings-Report-Diabetes-in-Pregnancy-2018.pdf>

In the Top End, there was a small decrease in breast cancer screening rates for non-Aboriginal women and a small increase for Aboriginal women, but these were not statistically significant:

- For non-Aboriginal women, there was a 6 per cent decrease (from 44.4 to 41.5 per cent) in the proportion who participated in breast cancer screening.
- For Aboriginal women, there was a 11 per cent increase (from 24.5 to 27.2 per cent) in the proportion who participated in breast cancer screening.

These trends were tested with participants in some focus groups and interviews, but awareness of them was limited and no possible drivers were identified. This may be because the trends were relatively small and inconsistent from year-to-year.

Figure 26 | Age-standardised breast cancer screening rates, women aged 50-69 years, by Aboriginal status and health service, 2011-2017 (financial years), NT

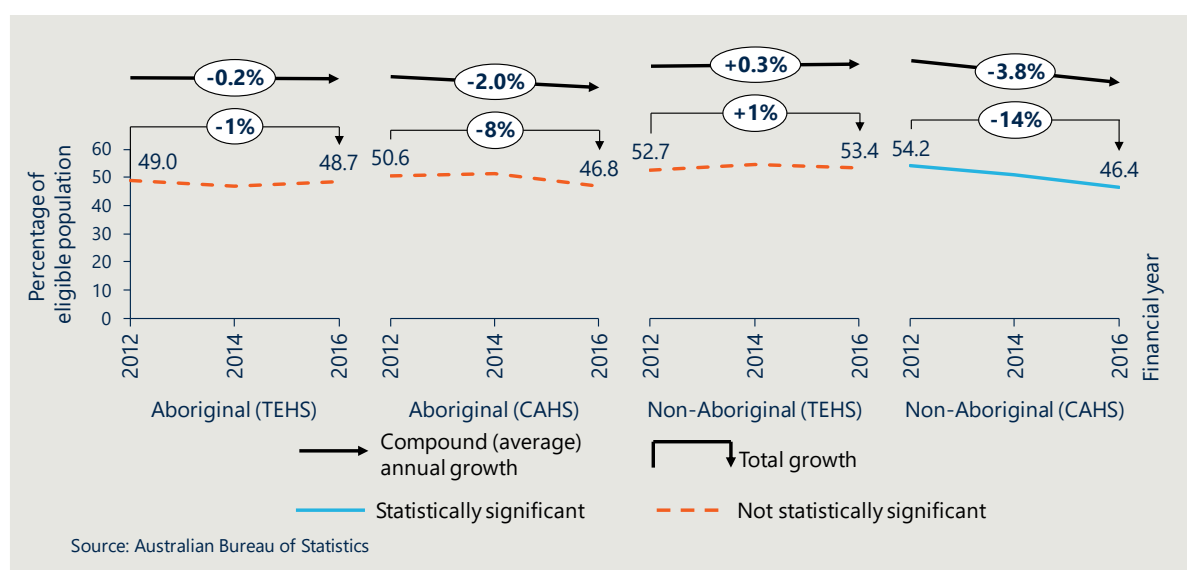


There was a decrease in cervical cancer screening rates for some population groups

From 2012 to 2016, there was a statistically significant decrease in the cervical cancer screening rate for non-Aboriginal women in Central Australia (of 14 per cent, from 54.2 to 46.4 per cent, as shown in Figure 27); there was also a non-statistically significant decrease in the cervical cancer screening rate for Aboriginal women in Central Australia (of 8 per cent, from 50.6 to 46.8 per cent).

Over this same period, there was minimal change in cervical cancer screening rates for women in the Top End. For non-Aboriginal women in the Top End, there was a non-statistically significant increase in the cervical cancer screening rate of 1 per cent (from 52.7 to 53.4 per cent). For Aboriginal women in the Top End, there was a non-statistically significant decrease in the cervical cancer screening rate of 1 per cent (from 49 to 48.7 per cent).

Figure 27 | Age-standardised cervical cancer screening rates women aged 20-69 years, by Aboriginal status and health service, 2012-2016 (financial years), NT



There appears to have been an increase in bowel cancer screening rates

Data limitations prevented a full statistical analysis of bowel cancer screening rates.¹³⁷ However, from 2007 to 2017, there were increases in bowel cancer screening rates of more than 20 per cent among both men and women (as shown in Figure 28):

- For men, there was a 20.8 per cent increase in bowel cancer screening (from 1.6 to 1.9 tests per 100 biennial population).
- For women, there was a 29.0 per cent increase in bowel cancer screening tests (from 1.8 to 2.3 tests per 100 biennial population).

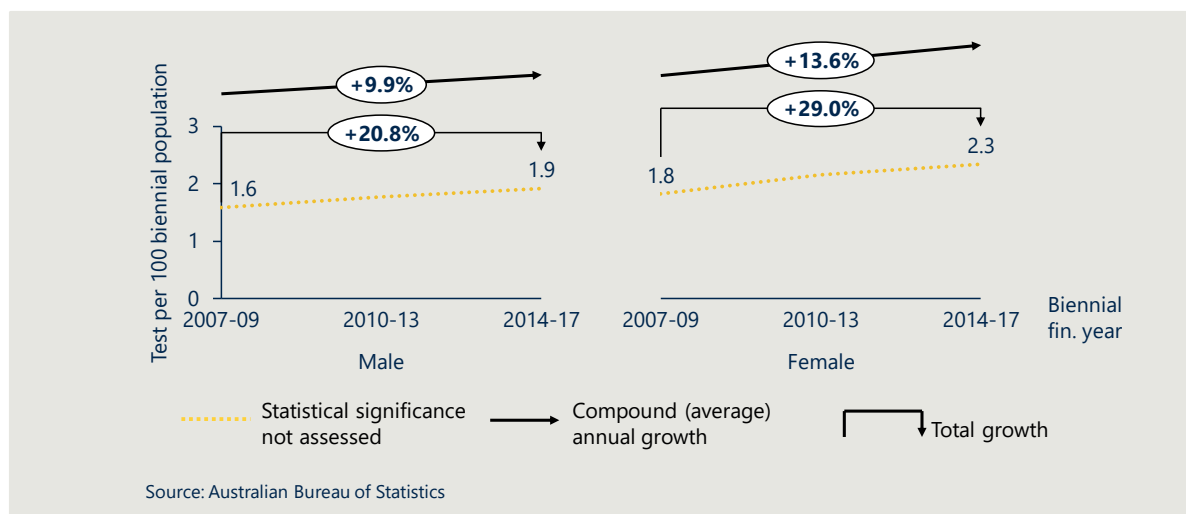
This may reflect the incremental rollout of the National Bowel Cancer Screening Program from 2006 to 2020.¹³⁸

¹³⁷ Regression analysis was not conducted for this indicator due to data only being available for three points in time.

¹³⁸ Cancer Council, population screening for colorectal cancer, 2017

https://wiki.cancer.org.au/australia/Guidelines:Colorectal_cancer/Population_screening_for_colorectal_cancer

Figure 28 | Bowel cancer screening rates for people aged 50-74 years, by health service, 2007-2017 (biennial financial years), NT



6.4.2 Extent to which outcome in program logic has been achieved

6.4.2.1 Potentially preventable hospitalisations due to chronic conditions remain high by national standards, but highlight possible improvements

Rates of potentially preventable hospitalisations due to chronic conditions increased less in the NT than nationally while remaining higher

The evaluation framework included potentially preventable hospitalisations due to chronic conditions as an indicator for key action areas 3 and 5, in particular of the effectiveness of primary health care in preventing and managing chronic conditions.

As discussed in Section 6.1.5, data for this indicator highlights that:

- **Potentially preventable hospitalisations due to chronic conditions increased less in the NT than they did nationally from 2012-13 to 2017-18 while remaining higher.** This suggests that the effectiveness of primary health care in preventing and managing chronic conditions improved in the NT relative to Australia as a whole while remaining higher over this period.
- **Rates of potentially preventable hospitalisations due to chronic conditions were lower in the Top End than in Central Australia from 2010 to 2018.** This suggests that the effectiveness of primary health care in preventing and managing chronic conditions is higher in the Top End than in Central Australia.

More detailed presentation and discussion of data on potentially preventable hospitalisations due to chronic conditions is included in Section 6.1.5.

Rates of all hospitalisations due to chronic conditions increased for all population groups

As discussed in Section 6.1.5, data on the rate of all hospitalisations due to chronic conditions shows significant increases for all population groups, including Aboriginal and non-Aboriginal men and women. These were primarily driven by:

- statistically significant increases in the rates of all hospitalisations due to diabetes, depression and anxiety, and COPD, for all population groups
- increases in the rate of all hospitalisations due to selected cancers for all population groups, which were statistically significant for all population groups except Aboriginal women.

The increases in the rates of hospitalisations due to diabetes were particularly large (greater than 100 per cent for all population groups). While these increases may reflect increasing burden of these conditions, or ineffective primary health care, or other factors, they could also reflect improved detection and access to care. More detailed presentation and discussion of data on all hospitalisations due to chronic conditions is included in Section 6.1.5.

6.4.3 Extent to which assumption in program logic has been substantiated

6.4.3.1 There is evidence of improvement in the ability of health service providers to identify, monitor and act on disease markers

The program logic made the following assumption for this key action area: "health service providers have the capability and systems that identify, monitor and act on early detection and management of disease markers." Evidence to support this assumption includes

- the existence of recording and reporting on chronic conditions risk factors
- the large increases in uptake for all types of health checks
- the views of stakeholders
- increases in the rate of potentially preventable hospitalisations due to chronic conditions that were lower in the NT than nationally.

Stakeholder concerns about whether there is sufficient workforce capacity to ensure consistent management following detection suggests health providers may be more limited in their ability to act on disease markers.

6.5 Key action area 4: Self-management

Key action area 4 focuses on self-management. The Strategy describes self-management support as aiming to improve individuals' ability to manage their conditions effectively and states it is applicable to all chronic conditions across all settings. A number of recent NT Health strategies include a focus on self-management or reference its importance, including the NT Renal Services Strategy 2017-2022, the NT Rehabilitation Strategy 2017-2021, the NT Cancer Care Strategy 2018-2022 and the NT Mental Health Strategic Plan 2019-2025.¹³⁹

The program logic specified the following outputs, outcome and assumption for this key action area:

- **Output 1:** The NT Chronic Conditions Self-management Framework 2012-2020 is developed and implemented.
- **Output 2:** Self-management training for health professionals is available and accessible.
- **Output 3:** Self-management is recorded in electronic client health records as part of care delivery.
- **Outcome:** Self-management is embedded in day-to-day practice of care delivery.
- **Assumption:** A Territory-wide approach to self-management will result in a client's ability to self-manage their chronic conditions.

This section presents findings about the extent to which these were observed in practice. These findings are summarised in Table 24 below.

¹³⁹ Department of Health, NT Renal Services Strategy 2017-2022, 2017, <https://health.nt.gov.au/strategies-and-reviews/nt-health-strategies>; Department of Health, NT Rehabilitation Strategy 2017-2021, 2017, <https://health.nt.gov.au/strategies-and-reviews/nt-health-strategies>; Department of Health, NT Cancer Care Strategy 2018-2022: March 2019 Edition, 2019, <https://health.nt.gov.au/strategies-and-reviews/nt-health-strategies>; NT Health, NT Mental Health Strategic Plan 2019-2025, <https://health.nt.gov.au/strategies-and-reviews/nt-health-strategies>

Table 24 | Performance of the Strategy in key action area 4

Element of program logic		Finding
Output	The NT Chronic Conditions Self-management Framework 2012-2020 is developed and implemented.	The NT Chronic Conditions Self-management Framework was developed and implemented, but stakeholder awareness of it varied at the time of this evaluation.
	Self-management training for health professionals is available and accessible.	A variety of self-management training opportunities for health professionals was offered, but several factors affected uptake.
	Self-management is recorded in electronic client health records as part of care delivery.	Self-management is reportedly not recorded by default in electronic client health records.
Outcome	Self-management is embedded in day-to-day practice of care delivery.	Stakeholders provided examples of successful self-management support initiatives. However, they held mixed views about the extent to which self-management is embedded in day-to-day care. There is also evidence that understanding of the concept of self-management varies.
Assumption	A Territory-wide approach to self-management will result in a client's ability to self-manage their chronic conditions.	The above findings suggest that, while there has been progress in relation to self-management, a Territory-wide approach has not been achieved.

Table 25 lists the indicators the evaluation framework included for this key action area and how they were measured for this report. Analysis of these indicators along with other data and literature has provided the evidence base for this section.

Table 25 | Evaluation indicators for key action area 4

Indicator name	Measure used	Type
Self-management	Consultation themes regarding strategic initiatives that promote and support health professionals to build clients' capacity to self-manage their chronic conditions, and the outcomes of these initiatives	Qualitative
Self-management support	Consultation themes regarding strategic initiatives undertaken by health service organisations to support improved self-management support by health professionals, including available self-management programs, and the outcomes of these initiatives	Qualitative

6.5.1 Extent to which outputs in program logic have been realised

6.5.1.1 The NT Chronic Conditions Self-management Framework was developed and implemented, but stakeholder awareness of it varied

The purpose of the NT Self-management Framework 2012-2020 was to provide a consistent approach and shared vision for self-management by:

- assisting health professionals to deliver support that empowers consumers to manage their health

- informing service providers about how to promote self-management and integrate it into practice
- guiding managers and policy-makers on how health services should be structured and funded to foster self-management.

Numerous activities were undertaken to develop and implement the NT Self-management Framework, including:

- a self-management forum attended by staff from the Department, NGOs, ACCHOs, education and research institutions, and the private sector (in 2010)¹⁴⁰
- establishment of a time-limited self-management working group to develop the NT Self-management Framework, comprising representatives from the Department, NGOs and ACCHOs (in 2011)¹⁴¹
- a series of roadshows to introduce the NT Self-management Framework to service providers (in 2012-13).¹⁴²

The mid-term evaluation found that, while the NT Chronic Conditions Self-management Framework provided a sound foundation for further work, its progress was limited by a lack of clarity about implementation, roles and responsibilities.¹⁴³

The stakeholders consulted for this evaluation had limited awareness of the NT Chronic Conditions Self-management Framework. The exception to this was stakeholders from the Department, some of whom had a higher level of awareness.

6.5.1.2 A variety of self-management training opportunities for health professionals was offered, but several factors affected uptake

Both face-to-face and online self-management training for health professionals was offered

In 2012, the University of South Australia delivered training in a self-management tool for health professionals from the Department, Danila Dilba Health Service, Miwatj Health Aboriginal Corporation and Healthy Living NT.

In that same year, the Department of Health's Chronic Conditions Strategy Unit collaborated with the Heart Research Centre Victoria to offer online self-paced training in self-management, which was taken up by 95 health professionals.¹⁴⁴

Since 2014, the Department has offered online e-Learning modules in chronic conditions prevention and management. Many of the modules were adapted from courses that were previously delivered face-to-face. This action was taken in response to a decline in the number of participants in the face-to-face courses, particularly remote health practitioners.

Several of the modules include content relating to self-management. For example, the "introduction to Preventable Chronic Conditions Management" module addresses "self-management issues to consider when working with clients with chronic conditions", while the "health promotion" module includes "information to assist health professionals to promote individual and community self-management of

¹⁴⁰ NT Department of Health. NT Chronic Conditions Prevention and Management Strategy 2010-2020: Annual Report 2010, Darwin, 2011.

¹⁴¹ NT Department of Health. NT Chronic Conditions Prevention and Management Strategy 2010-2020: Annual Report 2011, Darwin, 2012.

¹⁴² NT Department of Health. NT Chronic Conditions Prevention and Management Strategy 2010-2020: Annual Report 2012-13, Darwin, 2015.

¹⁴³ Menzies School of Health Research, Mid-term evaluation: Chronic Conditions Prevention and Management Strategy 2010-2020, 2016.

¹⁴⁴ NT Department of Health. NT Chronic Conditions Prevention and Management Strategy 2010-2020: Annual Report 2012-13, Darwin, 2015.

chronic conditions". A review found that, across all the modules available, there were 1,903 participant enrolments from 2014 to 2018, though this number declined steadily from 2016.¹⁴⁵

Awareness of these opportunities was variable among stakeholders

Awareness of these training opportunities was variable among stakeholders, both between and within locations. Some had participated in self-management training or were aware it was available, while others indicated there was no or insufficient training. Several stakeholders suggested it is difficult to stay on top of training when staff turnover is high. The review cited above found that barriers to uptake of e-Learning modules included high workloads, internet capability, computer access, and 'essential' training taking precedence over 'non-essential' training for NT Health staff working in primary health care.¹⁴⁶ In contrast, several stakeholders consulted through the validation survey suggested that self-management is essential, or that it should be compulsory for health professionals to support it.

6.5.1.3 Self-management is reportedly not recorded by default in electronic client health records

Care plans for consumers with chronic conditions are part of evidence-based care. The mid-term evaluation found health professionals use care plans within PCIS to support self-management. For example, a stakeholder consulted for the mid-term evaluation stated: "in PCIS we generate a care plan, and then we show the plan to the person. We can show them their progress over time and talk about how what they do is impacting on their health. Then the person can say how often they want follow up and what they want to do about medication."¹⁴⁷

Within these care plans, there is an item to assess consumers' smoking, nutrition, alcohol consumption, physical activity and emotional wellbeing (SNAPE). This provides an opportunity to support consumers' self-management. However, in practice, this opportunity is reportedly taken up infrequently.

There is no default template for self-management plans in PCIS; if a health professional does develop a self-management plan, it will be stored as a separate document from the care plan.

6.5.2 Extent to which program logic outcome has been achieved

6.5.2.1 Self-management is not yet fully embedded in care, and understanding of the concept varies

Stakeholders held mixed views about the extent to which self-management is embedded in care

In interviews and focus groups, various stakeholders reported the self-management capacity of consumers and staff was low, that self-management is not used effectively in care, or that it is not improving. Others reported there have been improvements; for example, in the extent of consumers' taking medication as prescribed or in the extent to which health professionals are aware of it and seeking to embed it. It was also reported that the extent to which self-management is practiced or supported varies between individuals, communities and health professionals.

Similarly, among survey respondents (as shown in Figure 29):

- 41 per cent indicated that the NT was performing poorly in embedding self-management of chronic conditions in the day-to-day practice of care delivery, compared to 29 per cent who indicated it was performing well.

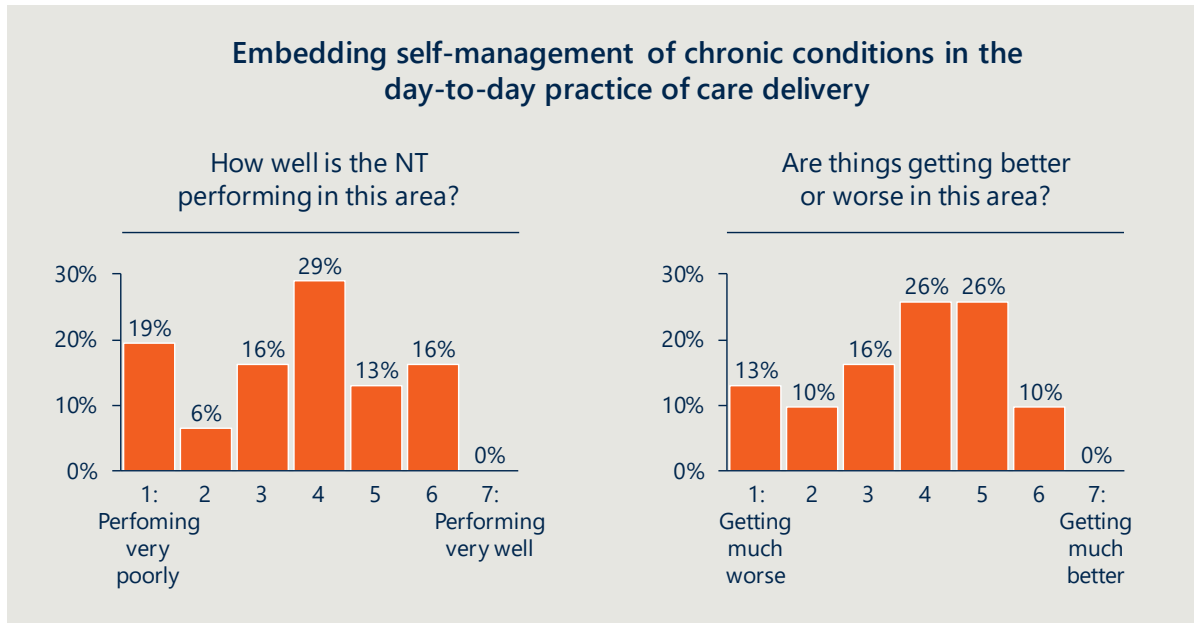
¹⁴⁵ NT Department of Health, Chronic Conditions e-Learning Review Report, 2019.

¹⁴⁶ NT Department of Health, Chronic Conditions e-Learning Review Report, 2019.

¹⁴⁷ Menzies School of Health Research, Mid-term evaluation: Chronic Conditions Prevention and Management Strategy 2010-2020, 2016.

- 39 per cent indicated the NT was getting worse in this area, as compared to 36 per cent who indicated it was getting better.

Figure 29 | Survey results regarding self-management



Understanding of the concept of self-management appears to vary

Stakeholders generally acknowledged the importance of self-management. However, several stakeholders expressed the view that self-management is inappropriate in certain circumstances; for example, for consumers experiencing crises or where case management approaches are working effectively. This is inconsistent with the conception of self-management in the Strategy and with guidance from bodies such as the World Health Organisation that self-management is part of 'routine quality care' and one of the core competencies for 'patient-centred care'.¹⁴⁸

One leader suggested self-management can be disempowering when it is practiced as telling consumers how to manage their conditions, rather than seeking their views and building their capacity, as should occur. Few examples of initiatives to support self-management were identified; those that were identified were often, strictly speaking, focused on concepts other than self-management (such as health literacy). This highlights possible variation in how self-management support is understood and provided.

Stakeholders identified enablers and barriers to self-management

Enablers for self-management that stakeholders identified included:

- strong relationships between health professionals and consumers
- health services providing consistent education and follow-up support
- tailoring of self-management plans to individuals and communities (including by addressing potential language barriers).

¹⁴⁸ World Health Organization. Preparing a health care workforce for the 21st century: The challenge of chronic conditions. 2005 https://www.who.int/chp/knowledge/publications/workforce_report.pdf?ua=1

Barriers for self-management that stakeholders identified included:

- health professionals having low understanding of self-management or defaulting to case management in the belief this is necessary to achieve KPIs
- a lack of culturally appropriate programs and resources (including in first languages)
- social determinants (including low general literacy)
- insufficient support for consumers to change behaviours (for example health coaching; there is not enough of this next level of support for behaviour change)
- staff turnover
- complexity of self-management tools
- competing priorities in consumers' lives (e.g. crises taking priority)
- lack of funding for time spent supporting self-management.

“The strategy highlights the need for self-management, but this has not been translated across to implementation.”

These enablers and barriers are broadly consistent with those identified by respondents to the validation survey.

The case study in Figure 30 overleaf demonstrates how the Top End Renal Services team has supported self-management for consumers requiring dialysis.

Figure 30 | Case study: Top End Renal Services education and training for peritoneal dialysis¹⁴⁹

End Stage Kidney Disease (ESKD) is when a person's severely impaired kidney function requires renal replacement therapy to sustain life. Dialysis is a form of renal replacement therapy involving the filtration of the blood and removal of waste products and excess fluid.

The burden of ESKD is significantly higher in the Aboriginal and Torres Strait Islander population, with rates of ESKD five times higher when compared to the general population.¹⁵⁰ Due to a significant proportion of Aboriginal and Torres Strait Islander people living in remote and very remote areas of the NT, there is limited access to renal replacement therapy, including ongoing support.¹⁵¹

Top End Health Service (based in Darwin) provides comprehensive renal care through Top End Renal Services, a multidisciplinary team that has provided people with an opportunity to have home-based peritoneal dialysis (PD) or haemodialysis (HD) through the introduction of self-management support. The first-choice treatment for ESKD in remote areas is PD because kidney function is preserved for a longer duration and PD self-care education and training is shorter.¹⁵² PD enables the person to return to their community sooner.

To undertake PD program, the person together with their chosen support person are funded under the NT Patient Assistance Travel Scheme to travel from community (home) to Darwin and back home. The person and their support person remain in Darwin for approximately two months. The program involves surgical placement of a PD catheter, education, training as well as knowledge and skills consolidation for PD self-care. On return home, the person continues to work collaboratively with the Top End Renal Services team and the local community clinic. Care is coordinated between the community clinics and Top End Renal Services to ensure appropriate follow up of PD patient and reviews with the Renal Services team via teleconference or videoconferencing and outreach services. The self-management support, which includes education and training, enables the person with ESKD to undertake home PD independently in their community.

There are some factors which may impact a person's eligibility for PD. These are poor vision, dexterity, mobility or strength; skin or nail infections; a history of abdominal conditions; ability to differentiate colours, and an openness to learning a new skill. The person undertaking home PD must also have a suitable location (home) to undertake dialysis.

After home PD commences, follow up involves monthly visits with the local community clinic (for check-up, blood tests and medication reviews) and twice-yearly visits with the Top End Renal Services team when the team visit the community and or home visits by the PD nurses. Patient outcomes include being able to return to their employment, supporting their family and being involved in the community such as hunting, fishing, camping and ceremonies.

6.5.3 Extent to which program logic assumption has been substantiated

6.5.3.1 A Territory-wide approach to self-management does not appear to have been achieved

The program logic made the following assumption for this key action area: "A Territory-wide approach to self-management will result in a client's ability to self-manage their chronic conditions." Evidence in Sections 6.5.1 and 6.5.2 suggests progress has been achieved in relation to self-management, including the NT Chronic Conditions Self-management Framework, training for health professionals and some successful initiatives.

However, other evidence suggests a Territory-wide approach to self-management has not been achieved. This evidence includes a lack of awareness of the NT Chronic Conditions Self-management Framework, stakeholders' mixed views about the extent to which self-management is embedded in care, and apparent variation in understanding of the concept of self-management.

¹⁴⁹ Case study provided by Top End Renal Services, TEHS.

¹⁵⁰ AIHW. Australia's health 2018: Incidence of end-stage kidney disease. 20 June 2018 <https://www.aihw.gov.au/reports/australias-health/australias-health-2018/contents/indicators-of-australias-health/incidence-of-end-stage-kidney-disease>

¹⁵¹ Hughes, J. T., Freeman, N., Beaton, B., Puruntatameri, A. M., Hausin, M., Tipiloura, G., ... & Maple-Brown, L. J. (2019). My experiences with kidney care: A qualitative study of adults in the Northern Territory of Australia living with chronic kidney disease, dialysis and transplantation. *PloS one*, 14(12).

¹⁵² Carruthers, D., & Warr, K. (2004). Supporting peritoneal dialysis in remote Australia. *Nephrology*, 9, S129-S133.

6.6 Key action area 5: Care for people with chronic conditions

Key action area 5 focuses on care for people with chronic conditions. The program logic specified the following outputs, outcome and assumption for this key action area:

- **Output 1:** Comprehensive monitoring and reporting of chronic conditions management is established in service management.
- **Output 2:** The NT Chronic Conditions Management Program is consistently used by health care providers across NT.
- **Output 3:** Innovative, integrated and evidence-based chronic conditions models of care established and evaluated.
- **Outcome:** All Territorians have equitable access to high-quality evidence-based care for chronic conditions.
- **Assumption:** Health services have appropriate systems and highly skilled workforce to deliver timely high-quality chronic care.

This section presents findings about the extent to which these were observed in practice. These findings are summarised in Table 26 below.

Table 26 | Performance of the Strategy in key action area 5

Element of program logic		Finding
Output	Comprehensive monitoring and reporting of chronic conditions management is established in service management.	Monitoring and reporting of chronic disease management has been established. However, reports are reportedly not easily accessible for stakeholders outside of health services.
	The NT Chronic Conditions Management Program is consistently used by health care providers across NT.	Components of the NT Chronic Conditions Management Program were reportedly used, but it is unclear to what extent. The full program is reportedly not clearly described and accessible to guide clinicians to provide chronic conditions care consistently throughout the NT.
	Innovative, integrated and evidence-based chronic conditions models of care established and evaluated.	There are examples of evidence-based models of care for chronic conditions, and use of GP management plans and team care arrangements has increased; however integrated and coordinated health service delivery remains challenging.
Outcome	All Territorians have equitable access to high-quality evidence-based care for chronic conditions.	There is evidence that high-quality care is provided in the NT. Stakeholders identified both improvements in access to care and ongoing challenges.
Assumption	Health services have appropriate systems and highly skilled workforce to deliver timely high quality chronic care.	High quality chronic care relies on strong systems and workforce, but also on integration, coordination, and service models.

Table 27 lists the indicators the evaluation framework included for this key action area and how they were measured for this report. Analysis of these indicators along with other data and literature has provided the evidence base for this section.

Table 27 | Evaluation indicators for key action area 5

Indicator name	Measure used	Type
Proportion of clients GP management plans and team care arrangements	Number of GP management plans per 100,000 population Number of team care arrangements per 100,000 population	Quantitative
Potentially preventable hospitalisations	Trend in rate of potentially preventable hospitalisations due to chronic conditions Trend in rate of all hospitalisations due to chronic conditions (including by chronic condition group)	Quantitative

6.6.1 Extent to which outputs in program logic have been realised

6.6.1.1 Monitoring and reporting of chronic conditions management has been established

Table 18 in Section 6.3 and Table 22 in Section 6.4 describe how chronic conditions risk factors, early detection and secondary prevention are recorded and reported on through the Chronic Conditions Management Model reporting, the NT AHKPIs, nKPIs, and the Service Delivery Agreements KPIs. These KPIs also include indicators for management (as shown in Table 28). While stakeholders had a high level of awareness of these monitoring and reporting mechanisms, these reports are reportedly less accessible to policy makers than to service providers. This has become more evident following the establishment of the Department, TEHS and CAHS as separate entities.

Table 28 | KPIs for chronic conditions management

KPI reports/sets	Examples of KPIs relating to care for people with chronic conditions
Chronic Conditions Management Model reporting	KPIs relating to: <ul style="list-style-type: none"> HbA1C¹⁵³ ACR¹⁵⁴ ACE inhibitor and/or ARB¹⁵⁵ GP management plans Blood pressure Diabetes management
NT AHKPIs ¹⁵⁶	KPIs relating to: <ul style="list-style-type: none"> HbA1C (for example, number and proportion of resident clients aged 15 years and over, who have been diagnosed with type 2 diabetes and have an HbA1c measurement result recorded within the previous 6 and 12 months)

¹⁵³ The NT AHKPIs define glycosylated haemoglobin (HbA1c) as an index of blood glucose level that is used to monitor blood sugar control in diabetic people.

¹⁵⁴ Albumin-to-creatinine ratio (ACR) is a urine test used to assess excess amounts of albumin (protein) in the urine due to kidney disease.

¹⁵⁵ The NT AHKPIs state that "control of high blood pressure is important in slowing the progression of renal disease. Use of Angiotension Converting Enzyme (ACE) inhibitor and/or Angiotension Receptor Blocker (ARB) have been demonstrated to significantly improve BP control and renal deterioration".

¹⁵⁶ NT Department of Health. Northern Territory Aboriginal Health Key Performance Indicators Public Release Report, 2014 <https://digitalibrary.health.nt.gov.au/prodjspu/bitstream/10137/1276/1/Northern%20Territory%20Aboriginal%20Health%20Key%20Performance%20Indicators%20Report%2c%202014.pdf>

- ACE inhibitor and/or ARB (for example, number and proportion of Aboriginal residents aged 15 years, and who have been diagnosed with type 2 diabetes with albuminuria and who are on an ACE inhibitor and/or ARB during the reporting period)
- GP management plans (for example, number and proportion of resident clients aged 15 years and over, diagnosed with type 2 diabetes and/or chronic heart disease and who have a GP management plan or alternative GP management plan at the end of the 1 and 2 year reporting period)
- Team care arrangements (for example, number and proportion of resident clients aged 15 years and over with type 2 diabetes and/or chronic heart disease and who have a team care arrangement or alternative team care arrangement at the end of the 1 and 2 year reporting period)
- Blood pressure (for example, number and proportion of residents aged 15 years and over who have type 2 diabetes, and a blood pressure measurement and good control)
- Rheumatic heart disease (for example, number and proportion of Aboriginal residents with a diagnosis of acute rheumatic fever or rheumatic heart disease who are prescribed as requiring 4 weekly BPG penicillin injections over a 12 month period and receive injections)
- Diabetic retinopathy (for example, number of adult residents with type 1 or type 2 diabetes who had retinal screening in the previous 1 and 2 years)

nKPIs¹⁵⁷

KPIs relating to:

- HbA1C (for example, number and proportion of regular clients with type II diabetes who have had an HbA1c measurement result recorded)
- GP management plans (for example, number and proportion of regular clients with a chronic disease for whom a GP management plan was claimed)
- Team care arrangements (for example, number and proportion of regular clients with a chronic disease for whom a team care arrangement was claimed)
- Immunisation (for example, number and proportion of regular clients with type II diabetes or COPD who are immunised against influenza)
- Kidney function (for example, number and proportion of regular clients with a selected chronic disease who have had a kidney function test)
- Blood pressure (for example, number and proportion of regular clients with Type II diabetes who have had a blood pressure measurement result recorded)

TEHS¹⁵⁸ and CAHS¹⁵⁹ Service Delivery Agreement KPIs (based on 2019-20 version)

KPIs relating to:

- HbA1C (for example, proportion of resident clients aged 15 years and over with type II diabetes who have had an HbA1c test in the last six months)

¹⁵⁷ AIHW. National Key Performance Indicators for Aboriginal and Torres Strait Islander Primary Health Care: Results to June 2018. https://www.aihw.gov.au/getmedia/cfd3d5ac-5d4c-4079-a364-cd43e2f97d53/NKPI%20for%20Aboriginal%20and%20Torres%20Strait%20Islander%20Primary%20Health%20Care_%20Results%20to%20June%202018.pdf.aspx?inline=true

¹⁵⁸ NT Department of Health. TEHS Service Delivery Agreement 2019-20 <https://digitalibrary.health.nt.gov.au/prodjspuibitstream/10137/7742/1/TEHS%20Service%20Delivery%20Agreement%202019%20to%202020.pdf>

¹⁵⁹ NT Department of Health. CAHS Service Delivery Agreement 2019-20 <https://digitalibrary.health.nt.gov.au/prodjspuibitstream/10137/7740/1/CAHS%20SDA%202019%20to%202020%20Service%20Delivery%20Agreement.pdf>

- Chronic disease management plans (for example, proportion of clients 15 years and over who have a chronic disease management plan)

6.6.1.2 Components of the NT Chronic Conditions Management Program were reportedly used but the full program description is not in place

The second implementation plan included a commitment to develop an “NT Chronic Conditions Management Program that focuses on ensuring continuity of care between acute and primary health care settings, appropriate to the changing needs of clients.”¹⁶⁰ The program was to be developed by TEHS and CAHS to ensure continuity and coordination of care for consumers with chronic conditions. A component of the program was reportedly developed, namely the traffic light reporting, but the full program is reportedly not described to clearly guide clinicians to provide chronic conditions care consistently throughout the NT.

6.6.1.3 There is evidence of innovation, integration and coordination of care, as well as ongoing difficulties in achieving this

There are examples of evidence-based innovation in service delivery

Innovation in service delivery is evident in the case studies throughout this report; for example:

- the case study on the KISP in Figure 16
- the case study on Congress’ improvements to service delivery in Figure 24
- the case study on AMSANT’s support for CQI in services in Figure 44.

Both the KISP and Congress examples reference data as a motivation for the changes in models of care. The CQI example demonstrates a sustained initiative to assess service delivery strengths and identify areas for improvement and innovation on a systems level, collaboratively.

This evidence does not conclusively demonstrate the extent of innovation in care across the NT, but it does highlight that innovation is taking place, at times as a result of initiatives that were intended to contribute to this.

Increasing numbers of GP management plans and team care arrangements provide evidence of increased coordination of care for all Territorians

The evaluation framework included GP management plans and team care arrangements as indicators of consumers with chronic conditions receiving best practice care. Such care plans are recognised as one way to coordinate care across multiple providers and settings.¹⁶¹

From 2011 to 2019, there were increases in the number of GP management plans for both men and women (as shown in Figure 31):

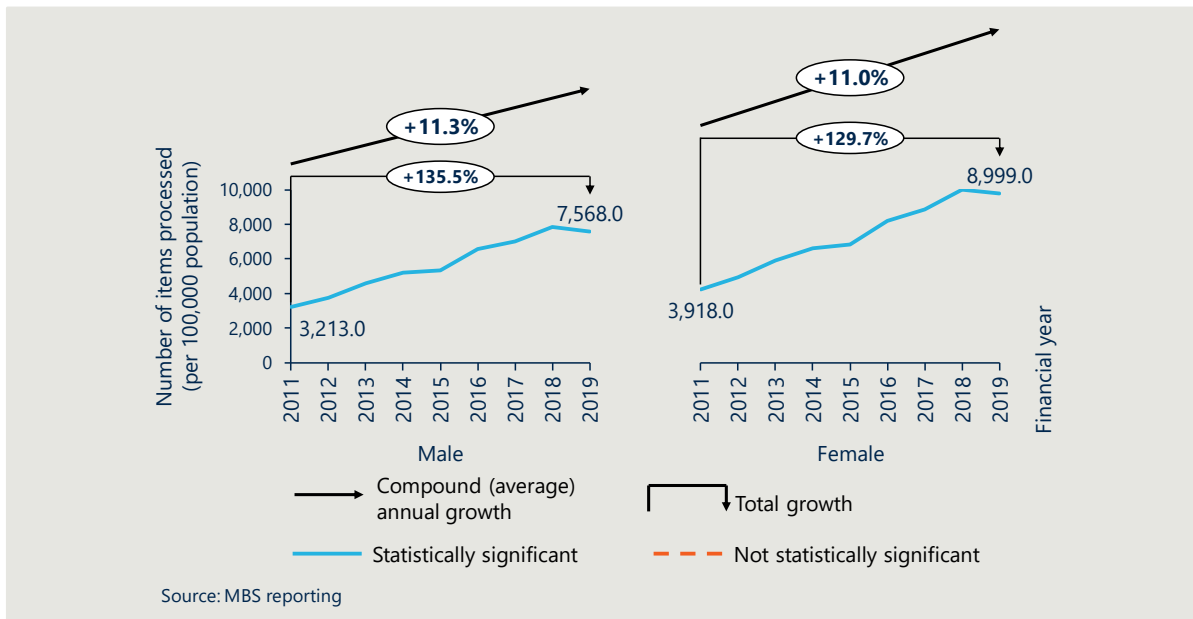
- For men, there was a statistically significant 135.5 per cent increase in GP management plans, from 3,213 to 7,568 MBS items processed per 100,000 population.
- For women, there was a statistically significant 129.7 per cent increase in GP management plans, from 3,918 to 8,999 MBS items processed per 100,000 population.

¹⁶⁰ NT Department of Health, Chronic Conditions Prevention and Management Strategy 2010-2010: Implementation Plan 2014-2016, retrieved March 2020

https://digitallibrary.health.nt.gov.au/prodjspu/bitstream/10137/608/1/NT%20Implementation%20Plan%202014-2016_FINAL.pdf

¹⁶¹ Australian Institute of Health and Welfare, Aboriginal and Torres Strait Islander Health Performance Framework (HPF) report 2017, updated 5 Dec 2018. <https://www.aihw.gov.au/reports/indigenous-health-welfare/health-performance-framework/contents/tier-3-effective-appropriate-efficient/3-18-care-planning-for-chronic-diseases>

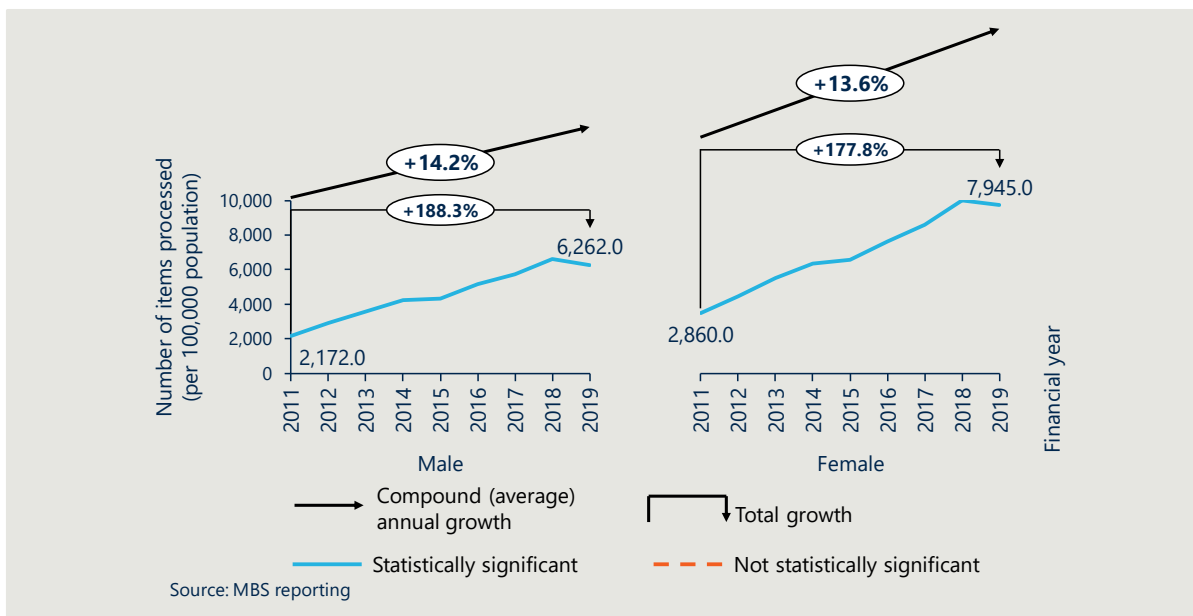
Figure 31 | Rate of GP management plans, by gender, 2011-2019 (financial years), NT



Over this same period, there were increases in the number of team care arrangements for both men and women (as shown in Figure 32):

- For men, there was a statistically significant 188.3 per cent increase in team care arrangements, from 2,172 to 6,262 MBS items processed per 100,000 population.
- For women, there was a statistically significant 177.8 per cent increase in team care arrangements, from 2,860 to 7,945 MBS items processed per 100,000 population.

Figure 32 | Rate of team care arrangements, by gender, 2011-2019 (financial years), NT



As with health checks, stakeholders attributed increases in the number of care plans to efforts on the part of health service providers to increase MBS funding and meet KPIs, and while stakeholders saw them as valuable many were skeptical about their effect on consumers' health outcomes; for example, because the

plans may not be followed. Various reasons were provided when prompted about why plans may not be followed, including:

- client factors (e.g. transient client population, clients not taking active steps)
- clinic or clinician factors (e.g. lack of patient input, care plans being initiated without the consumer present).

However, care plans were also commonly raised as an example of improvement; for example:

- staff being encouraged to identify conditions early and develop care plans
- inclusion of care plans in electronic client health information systems
- use of GP management plans to support self-management.

“Probably the most useful technological advancement is the [chronic conditions] management care built into the medical software that basically lays out best practice into care plans automatically.”

Stakeholders described ongoing difficulties in achieving integrated, coordinated, patient-centred care

Some stakeholders said the integration between primary and acute settings was improving, however, in general it was viewed as challenging. Barriers to integration between primary and acute settings identified by stakeholders included workforce shortages that lead to a reactive acute focus; and siloes and poor communication between primary and acute services, even within organisations. Stakeholders made various suggestions to improve connections between primary and acute care, such as joint planning and funding, and dedicated staff to focus on the transition.

Stakeholders referenced several challenges to achieving coordinated care. These included comorbidities, increasing sub-specialisation, a lack of care coordinators (and insufficient funding for care coordinators), and programs, initiatives and funding arrangements that focus on body parts or physiological systems.

6.6.2 Extent to which outcome in program logic has been achieved

6.6.2.1 There is evidence that high quality care is provided in the NT, but stakeholders held mixed views about its accessibility

Potentially preventable hospitalisations due to chronic conditions increased less in the NT than nationally, but remained higher and varied between the Top End and Central Australia

The evaluation framework included potentially preventable hospitalisations due to chronic conditions as an indicator for key action areas 3 and 5, in particular of the effectiveness of primary health care in preventing and managing chronic conditions.

As discussed in Section 6.1.5, data for this indicator highlights that:

- **Potentially preventable hospitalisations due to chronic conditions increased less in the NT than they did nationally from 2012-13 to 2017-18 while remaining higher.** This suggests that the effectiveness of primary health care in preventing and managing chronic conditions improved in the NT relative to Australia as a whole while remaining lower over this period.
- **Rates of potentially preventable hospitalisations due to chronic conditions were lower in the Top End than in Central Australia from 2010 to 2018.** This suggests that the effectiveness of primary health care in preventing and managing chronic conditions is higher in the Top End than in Central Australia.

More detailed presentation and discussion of data on potentially preventable hospitalisations due to chronic conditions is included in Section 6.1.5.

Rates of all hospitalisations due to chronic conditions increased for all population groups

As discussed in Section 6.1.5, data on the rate of all hospitalisations due to chronic conditions shows significant increases for all population groups, including Aboriginal and non-Aboriginal men and women. These were primarily driven by:

- statistically significant increases in the rates of all hospitalisations due to diabetes, depression and anxiety, and COPD, for all population groups
- increases in the rate of all hospitalisations due to selected cancers for all population groups, which were statistically significant for all population groups except Aboriginal women.

The increases in the rates of hospitalisations due to diabetes were particularly large (greater than 100 per cent for all population groups). While these increases may reflect increasing burden of these conditions, or ineffective primary health care, or other factors, they could also reflect improved detection and access to care. More detailed presentation and discussion of data on all hospitalisations due to chronic conditions is included in Section 6.1.5.

There is evidence that high-quality care is provided in the NT, but stakeholders held mixed views about its accessibility

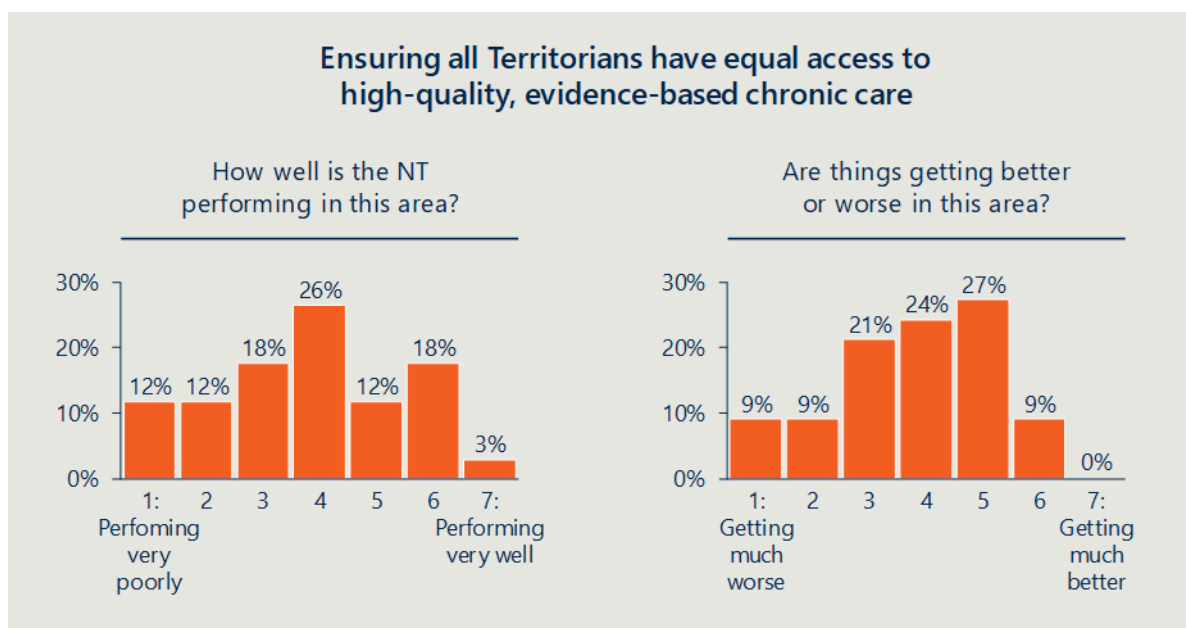
Evidence that high-quality care is provided in the NT includes, for example:

- High uptake of care plans including GP management plans and team care arrangements (as discussed in Section 6.6.1.3).
- The existence of a single set of evidence-based guidelines, namely the Central Australian Rural Practitioners Association (CARPA) Standard Treatment Manual, leading to a uniform approach to primary care for Aboriginal patients (as discussed in Section 6.8.1.4).

However, stakeholders held mixed views about the extent to which this care was accessible. This was evident among survey respondents (as shown in Figure 33):

- 42 per cent indicated the NT was performing poorly in ensuring all Territorians having equal access to high-quality, evidence-based chronic care, compared to 33 per cent who indicated it was performing well.
- 39 per cent indicated the NT was getting worse in this area, compared to 36 per cent who indicated it was getting better.

Figure 33 | Survey results regarding care for people with chronic conditions



Stakeholders in some locations reported improvements in access to care; for example, greater access to specialists in some remote communities (including via telehealth) and increased numbers of Remote Medical Practitioners.

Stakeholders also cited a number of ongoing barriers to access. One barrier cited was consumers having “clinic fatigue”¹⁶² or other priorities due to more pressing immediate crises. Another barrier cited was culturally inappropriate services, though there are initiatives in place to improve this; for example, the NT Health Aboriginal Cultural Security Framework (2016-2026) is a guide for NT Health staff to implement culturally secure services for Aboriginal people. Another barrier cited (in a smaller location) was limited local resources and services and consumers needing to travel long distances and/or wait long periods.

Several stakeholders highlighted that relationships are essential to the management of chronic conditions in remote communities. For example, strong relationships with community-members enable health professionals to tell the ‘deep stories’ of chronic conditions, while strong relationships with other service providers enable health providers to collaborate with them to address social determinants. High workforce turnover makes this kind of relationship-building difficult.

The NT Diabetes Network is an example of stakeholders working collaboratively to improve awareness, quality of care, and culturally accessible services. This is detailed in Figure 34 below.

¹⁶² This term was used to refer to consumers disengaging from health services if they need to visit them frequently; for example, because they have multiple conditions.

Figure 34 | Case study: Establishing the NT Diabetes Network to streamline policy and practice

The Diabetes Network was established in February 2018, led by the Department of Health and other stakeholders. Its aim was to help address rising rates of diabetes in Aboriginal communities, including in younger children, by filling a gap in the health system and a mechanism to streamline policy and practice across the NT by regularly bringing key stakeholders together. The Network has a working group focused on diabetes in youth and has policy, strategy and secretariat support from the Department of Health.

The Network has created a workplan, including the following priorities:

- improving awareness and management of type 2 diabetes in Aboriginal youth
- improving screening, management and postpartum care for Aboriginal women with diabetes in pregnancy
- improving culturally appropriate prevention and management strategies for Aboriginal people with type 2 diabetes, with a focus on women and youth.

These priorities were part of the NT's efforts to meet its commitment to the National agenda on diabetes approved by the Council of Australian Governments and reflected in the Australian National Diabetes Strategy 2016-2020 Implementation Plan.¹⁶³

The Network has been successful at bringing people together and achieving changes. It has developed clinical guidelines for the screening and management of type 2 diabetes in Aboriginal people aged between 10 and 25. Such guidelines did not exist nationally, because the NT is seeing this diabetes emerge in people earlier in their lives than in other jurisdictions. The Network is also developing fact sheets on youth-onset diabetes for use in Aboriginal communities, and has conducted awareness raising around type 2 diabetes in youth through forums and presentations, such as to the NT Clinical Senate, and the Health Minister.

The Network provides an example of where an overarching strategy can influence further partnerships, planning, and action to address chronic conditions, and a mechanism for ongoing coordination of efforts.

6.6.3 Extent to which assumption in program logic has been substantiated

6.6.3.1 High-quality chronic care requires strong systems and workforce, but also patient-centred, integrated and coordinated service models across the care continuum

The program logic made the following assumption for this key action area: "Health services have appropriate systems and highly skilled workforce to deliver timely high-quality chronic care." This assumption is complex and underpinned by an interplay of most key action areas, particularly those focusing on:

- workforce planning and development (key action area 6)
- information, communication and disease management systems (key action area 7)
- CQI (key action area 8).

For example, over the course of the Strategy, there has been improvement in CQI practices within the workforce. There have also been advancements in the ICT and disease management systems (such as electronic medical records, My eHealth Record, traffic light reporting and KPIs) which have contributed to improved recording and reporting of the management of chronic conditions.

However, the evidence regarding key action area five highlights that workforce and systems are not the only prerequisites for timely high-quality care. Coordination and integration continue to present challenges for chronic conditions care in the NT, which extend beyond workforce and systems. This is also a question of system design and service delivery models, to enable high quality care such as comprehensive primary health care, multidisciplinary teams for clients with complex conditions or

¹⁶³ Australian Health Ministers' Advisory Council.
[https://www1.health.gov.au/internet/main/publishing.nsf/Content/3AF935DA210DA043CA257EFB000D0C03/\\$File/FINAL%20-%20Jan%202018-%20PDF%20-%20-%20Implementation%20Plan%20-%20Diabetes%20Australia%20Focus.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/3AF935DA210DA043CA257EFB000D0C03/$File/FINAL%20-%20Jan%202018-%20PDF%20-%20-%20Implementation%20Plan%20-%20Diabetes%20Australia%20Focus.pdf)

comorbidities, and referral pathways and communication to provide the right care at the right time for the consumer.¹⁶⁴

Further to this, the implementation of the NT Health Aboriginal Cultural Security Framework is ongoing and the impact of cultural security on safety and quality continues to represent a significant factor in ensuring equal access. More information on the NT Aboriginal Cultural Security Framework, and an example of implementation success, is included in Figure 35.

Figure 35 | Case Study: Implementation of the NT Aboriginal Cultural Security Framework at the Allan Walker Cancer Care Centre

The Northern Territory Aboriginal Cultural Security Framework 2016-2026 was signed in June 2016. The Framework builds on the Aboriginal Cultural Security Policy developed in 2007, which articulated the importance of culture in improving the health outcomes of Aboriginal people and communities.

The Framework assists NT Health staff to consider and implement cultural security initiatives through priority action areas, including:

1. workforce
2. communication
3. whole of organisation approach
4. leadership
5. consumer and community participation
6. quality improvement, planning, research and evaluation.

Through structured action across these priorities, NT Health continues to improve access and equity to health services for Aboriginal Territorians.

Allan Walker Cancer Care Centre – Cultural Security Assessment

The Aboriginal Health Policy unit continued to work with TEHS and CAHS in the provision of culturally safe services.

The unit supported the Alan Walker Cancer Care Centre (AWCCC) to undertake a staff self-assessment and an organisational cultural security assessment of its services to improve engagement and outcomes for Aboriginal patients. The review led to the development of a Cultural Security Workplan and Statement of Commitment to Aboriginal Cultural Security for the AWCCC.

As a result of these activities, the AWCCC undertook the following initiatives aimed at improving outcomes for Aboriginal patients:

- Promoting the Statement of Commitment to Aboriginal Cultural Security for the staff at AWCCC.
- Improving the cultural awareness and competencies of AWCCC staff through regular refresher programs and cultural activities.
- Conducting research and audits to identify any indication of disparity in service, care and outcome.
- Introducing an additional comprehensive assessment of patients upon initial presentation to enable individualised care and response from the health professionals AWCCC.
- Providing more cancer education and training to Aboriginal Health workers, Aboriginal Liaison and Officers and Aboriginal Interpreters from community and regional health centres throughout the Northern Territory.
- Enhancing cancer education provided to undergraduate AHPs at the Batchelor Institute.
- Collaborating with primary health care to deliver early detection education to Aboriginal Communities.

Successes

With the opening of the AWCCC service they had significantly increased the participation of Aboriginal people to radiation therapy treatment and gradually improved the compliance to treatment by 15% to 95% in 2016.

¹⁶⁴ NT Department of Health, Chronic Conditions Prevention and Management Strategy 2010-2020, p11.

6.7 Key action area 6: Workforce planning and development

Key action area 6 focuses on workforce planning and development. Its objective was to “recruit, develop and retain an appropriately skilled workforce.”¹⁶⁵

Chronic conditions prevention and management is primarily provided through primary health care; this care is mostly delivered by nurses, midwives and AHPs resident in remote communities, with medical, nursing and allied health staff commonly visiting communities for temporary periods.¹⁶⁶

Workforce planning and development is a complex and ongoing task. Recruitment and retention have been continuing challenges, particularly in remote communities; high levels of turnover can affect patient outcomes and increase costs.¹⁶⁷ Education institutions in the NT and beyond play a significant role in strengthening the health workforce by influencing the availability of qualified workers. In addition, there are a range of efforts and initiatives to increase the representation of Aboriginal staff in the health workforce.¹⁶⁸

The program logic specified the following outputs, outcomes and assumptions for this key action area:

- **Output 1:** Education and training opportunities in prevention and management of chronic conditions are available and accessible.
- **Output 2:** The uptake of training in chronic conditions, face-to-face and e-learning is consistent throughout the last ten years.
- **Output 3:** An increasing number of Aboriginal people employed at all levels and areas of health is evident in the last ten years.
- **Outcome:** An appropriately skilled workforce in prevention and management of chronic conditions is employed.
- **Assumption:** Sound workforce planning and development will provide effective strategies for recruitment and retention of a skilled workforce.

This section presents findings about the extent to which these were observed in practice. These findings are summarised in Table 29 below.

Table 29 | Performance of the Strategy in key action area 6: Workforce planning and development

Element of program logic		Finding
Output	Education and training opportunities in prevention and management of chronic conditions are available and accessible.	There are a range of opportunities available to professionals, though some health professionals are unaware of the options available.
	The uptake of training in chronic conditions, face-to-face and e-learning is consistent throughout the last ten years.	Many professionals make use of training opportunities, but there are also barriers to uptake, particularly for staff in more remote towns and communities. This has contributed to declining uptake of e-learning over the last ten years.
	An increasing number of Aboriginal people employed at all levels and areas of health is evident in the last ten years.	The number of Aboriginal staff in NT Health has increased. However, the number of AHPs has fallen, which was a matter of major concern for many of the stakeholders consulted.

¹⁶⁵ NT Department of Health, Chronic Conditions Prevention and Management Strategy, 2010-2020, p30.

¹⁶⁶ Zhao et al. (2018), Cost impact of high staff turnover on primary care in remote Australia, Australian Health Review 43(6) 689-695.

¹⁶⁷ Zhao et al. (2018), cost impact of high staff turnover on primary care in remote Australia, Australian Health Review 43(6) 689-695.

¹⁶⁸ See for example the NT Government Aboriginal Employment and Career Development Strategy 2015-2020.

Outcome	An appropriately skilled workforce in prevention and management of chronic conditions is employed.	Several stakeholders suggested there had been improvements in recruitment of appropriately skilled staff. Most agreed retention is an ongoing challenge and turnover is high.
Assumption	Sound workforce planning and development will provide effective strategies for recruitment and retention of a skilled workforce.	It is not possible within the evidence-base for the evaluation to attribute observed improvements to initiatives such as the NT Health Workforce Strategy. However, improvements have occurred in some areas, and ongoing workforce planning will play an important role in achieving continuing improvements.

Table 30 lists the indicators the evaluation framework included for this key action area and how they were measured for this report. Analysis of these indicators along with other data and literature has provided the evidence base for this section.

Table 30 | Evaluation indicators for key action area 6

Indicator name	Measure used	Type
Number of Aboriginal health staff as a proportion of overall FTE / number of AHPs	Proportion of FTE NT Health staff who identify as Aboriginal Number of FTE NT Health AHP, nursing and medical staff who identify as Aboriginal	Quantitative
Professional development in relation to chronic conditions	Number and nature of professional development activities in relation to chronic conditions	Quantitative
Workforce planning and development	Consultation themes regarding strategic initiatives that promote and support workforce planning and professional development in relation to chronic conditions, and the outcomes of these initiatives	Qualitative

6.7.1 Extent to which outputs in program logic have been realised

6.7.1.1 Professional development in relation to chronic conditions is available, though not always taken up

The health professionals consulted were generally aware of professional development opportunities relating to chronic conditions, including those undertaken under the Strategy. Many had participated in them and found them beneficial. Examples of professional development which surfaced during the consultation included:

- **E-learning courses** for chronic conditions were introduced in 2014 and are available to all NT Health and non-departmental staff.¹⁶⁹ The current courses are: Preventable Chronic Conditions, Diabetes Care in the Community, Chronic Disease Story Board and Renal Disease. A review of the courses found 1,903 participants enrolled in them from 2014 to 2018. However, there was a steady decrease in enrolment for most modules from 2016. The most popular courses have been on renal disease and prevention. Some front-line stakeholders mentioned the e-learning courses and support provided by NT Government to access training.
- **Professional development workshops** were advertised through the eCDNews between 2010 and 2018. This ranged from 43 separate professional development opportunities advertised in 2016 down

¹⁶⁹ NT Department of Health, Chronic Conditions e-Learning Review Report, 2019.

to 16 in 2018 (after which eCDNews stopped). The opportunities advertised included short courses on chronic care, diabetes management, mental health first aid and health promotion.¹⁷⁰ Data with which to explore the uptake of these advertised workshops was unavailable.

- **CDN NT Conference** ran each year until 2017 when the decision was made to run it biennially with workshops held in the alternating years. The conference provides continuing professional development points that contribute to health professionals' registration requirements. Table 31 highlights the chronic condition themes spanned throughout the duration of the conferences and the number of participants who attended.¹⁷¹
- **CQI collaborative workshops** for developing understanding of CQI in the workforce and sharing information among health professionals.

Table 31 | CDN NT Conferences

Year	Conference theme	Partners	Number attended
2010	Health Literacy: Opening Doors to Health and Wellbeing		190
2011	Out of the shadows, into the spotlight: Chronic diseases – mental health		186
2012	Promoting Healthy Childhood – Preventing Chronic Conditions		244
2013	Self-management: A Partnership Approach		166
2014	Equity @ the Centre: Action on the Social Determinants of Health	Australian Health Promotion Association	332
2015	Connecting the Care Across the Life Span		181
2016	Protection, Prevention Promotion Healthy Futures: Chronic Conditions and Public Health	Public Health Association Australia	214
2017	Integrated Care: Healthy Child to Healthy Ageing	Australian Disease Management Association	175
2018	(biennial conference from 2017)		-
2019	Healthy Body, Healthy Minds, Healthy Communities	Baker Heart & Diabetes Institute	109

Other professional development opportunities that stakeholders suggested would be beneficial included training in cultural awareness, resilience, and self-care. Several stakeholders mentioned the need to improve the alignment of the skills and training of the workforce to prevention and management of chronic conditions. For example, some staff with a background in acute care may not have training in providing chronic care and hence may require upskilling. There is also a need for roles such as nurse educators, dieticians and psychologists to create multidisciplinary teams with the variety of skills needed for effectively addressing chronic conditions holistically. Stakeholders in Tennant Creek and Alice Springs described professional development as essential to staff retention (for both Aboriginal and non-Aboriginal staff) and reported that staff are encouraged to undertake further learning.

¹⁷⁰ Information on workshops promoted by eCDNews provided by the NT Department of Health.

¹⁷¹ Conference details provided by the NT Department of Health.

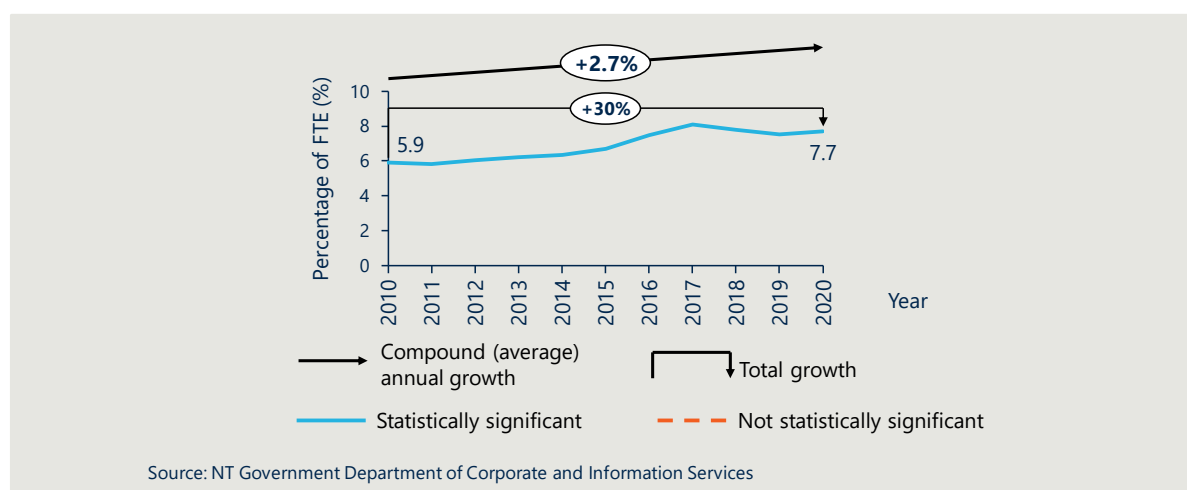
There were several barriers to the uptake and/or effectiveness of professional development opportunities:

- Some people said they had not heard of professional development opportunities or that staff did not have the time to make use of them. This was especially the case for staff in remote areas, who reported lower awareness and uptake, the latter due to the greater difficulty of covering their positions during absences, for example.
- Other factors mentioned included day-to-day demands and competing training requirements; for example, NT Government primary health care staff having compulsory training requirements which limit time for non-compulsory topics such as chronic conditions training.
- Some participants suggested that the CDN Conference, while a good opportunity, has become less relevant to people working in the NT as it has grown larger and attracted more interstate participants.
- It is challenging for Aboriginal people to obtain the qualifications required for many health roles.
- High staff turnover was also mentioned as a barrier.

6.7.1.2 The proportion of the NT Health workforce who are Aboriginal has increased, while the number of AHPs has decreased

There was an increase in the proportion of FTE staff in the Department, TEHS and CAHS who identify as Aboriginal from around 6 per cent in 2010 to around 8 per cent in 2020 (as shown in Figure 36 below). This represents a statistically significant 30 per cent increase in the percentage of FTE staff. The most commonly cited initiative to recruit, develop and retain Aboriginal staff was the NT Government’s Special Measures initiative. Other suggestions to improve representation of Aboriginal staff included more flexible working arrangements (e.g. cultural leave), study pathways and mentoring.

Figure 36 | Percentage of FTE NT Health staff who identify as Aboriginal or Torres Strait Islander, 2010-2020



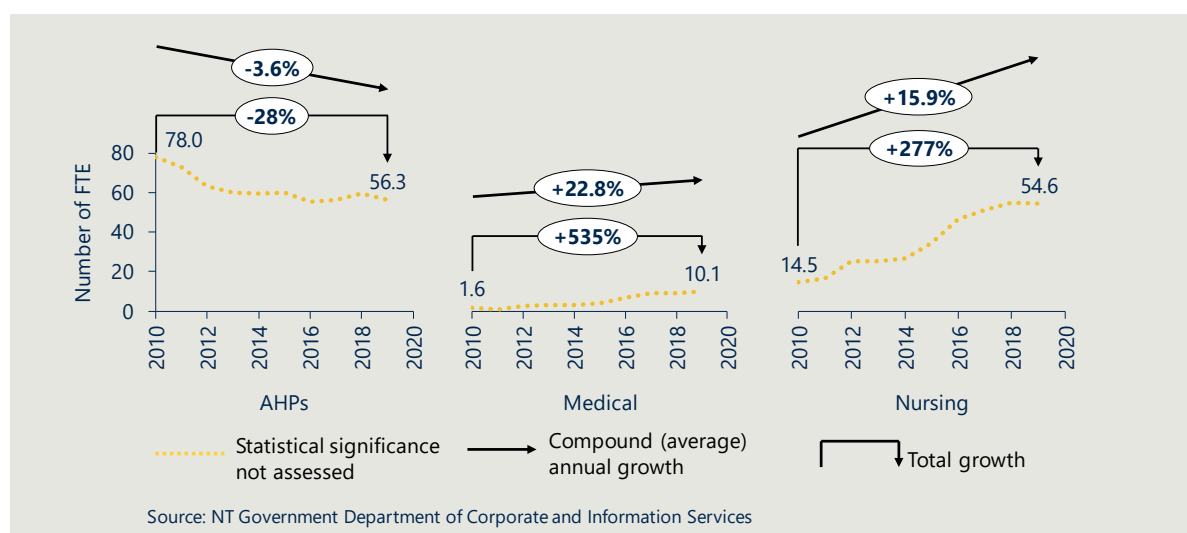
From 2010 to 2019, the number of FTE NT Health staff in medical and nursing roles who identify as Aboriginal increased from relatively low numbers (as shown in Figure 37):

- For medical roles, the number of FTE NT Health staff who identify as Aboriginal increased by 533 per cent (from 1.6 to 10.1).
- For nursing roles, the number of FTE NT Health staff who identify as Aboriginal increased by 277 per cent (from 14.5 to 54.6).

In consultations, some stakeholders noted the importance of increasing the representation of Aboriginal people in positions like these, including doctors, nurses, and managers. This was echoed in stakeholders’ responses to the validation survey.

In contrast, for AHP roles, the number of FTE NT Health staff who identify as Aboriginal decreased by 28 per cent (from 78 in 2010 to 56) over this period. More broadly, across the NT, the number of AHPs fell from over 250 people in 2012 to less than 220 people in 2019.¹⁷²

Figure 37 | Number of FTE NT Health staff who identify as Aboriginal or Torres Strait Islander, for AHPs, medical, and nursing staff, 2010-2019



Many stakeholders voiced concerns about the decreasing numbers of AHPs, both in the initial consultations of this evaluation and in the validation survey where preliminary findings were tested. Numerous factors were suggested as contributing to the decline, including:

- the need to travel away from their homes and communities for training
- the reclassification of 'Aboriginal Health Practitioner' as a protected title with registration requirements
- inconsistently defined responsibilities, or under-utilisation of practitioners (for example, being used as drivers)
- a lack of incentives (for example, staff housing being provided for other staff but not for AHPs)
- a lack of prestige, respect, or feeling valued by colleagues
- a lack of mentoring and traineeship opportunities
- humbugging (repeated demands from friends or family)
- culturally inappropriate working hours and leave arrangements
- ongoing online training which requires access to a computer, and strong literacy and numeracy skills, which present barriers for some.

Factors were raised in consultations which might mitigate the decline of AHPs or help contribute to an increase in the future. One factor was the marketing of the AHP role to individuals and also marketing the benefits of the role to health services, through brochures and videos. Another was the potential for more dialogue in communities about what the AHP role is and is not, in order to reduce humbugging. A third, more complex factor is the regulation of AHPs through the Aboriginal and Torres Strait Islander Health Practice Board: this imposes qualification requirements on the role, which may act as a dampener on supply; on the other hand, some stakeholders suggested this may have improved the status of the role, which could attract more students to the pathway.

¹⁷² Aboriginal and Torres Strait Islander Health Practice Board, statistics <https://www.atsihealthpracticeboard.gov.au/About/Statistics.aspx>

6.7.1.3 High turnover creates challenges for preventing and managing chronic conditions, particularly in remote communities

Stakeholders reported recruitment has improved over time

Stakeholders indicated that there had been a focus on recruitment and that they had seen improvements over time. Examples included Commonwealth-funded positions, an increase in Preventable Chronic Conditions Educators and health promotion staff and efforts in bulk recruitment.

Some stakeholders said that in East Arnhem there has been an increase in the number of doctors, which stakeholders largely attributed to the national effort to raise the profile of 'Rural Generalists', along with effective succession planning by Gove Hospital, and the hospital offering good remuneration with a strong training pathway. In contrast, stakeholders reported a decrease in the number of nurses in East Arnhem (and an increase in the number of 'agency nurses') due to worsening remuneration and employment conditions.

Retention is an ongoing challenge

Many stakeholders said workforce retention was an ongoing issue, particularly in remote areas, throughout this evaluation's initial consultations and later in the validation survey on preliminary findings. There were many factors offered to explain high turnover rates, including:

- geographical isolation and difficult working conditions in remote areas (such as a lack of internet or phone reception)
- a lack of mentoring and opportunities for career progression
- high-stress environments, long hours and burnout
- insufficient training and preparedness (which could point to a lack of training on offer, or barriers to access what is already available, such as lack of time to undertake e-learning courses)¹⁷³
- differing preferences of younger staff, such as more focus on work-life balance and time off for holidays
- insufficient commitment from some staff to building long-term relationships in communities.

“High staff turnover is a major limitation to the provision of care required for management of chronic diseases. Especially in remote communities where the therapeutic relationship is so important.”

per year.¹⁷⁴

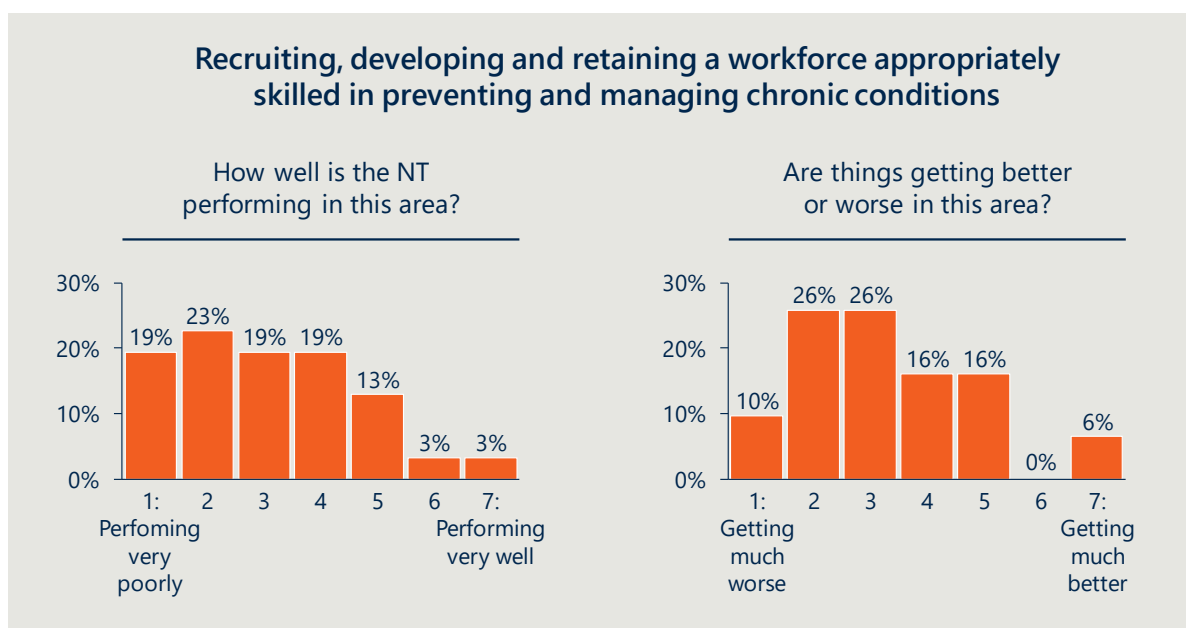
There were many consequences of high turnover raised throughout the consultations, impacting on the quality of care for preventing and managing chronic conditions. This included difficulty in providing continuity of care, impacts on community engagement and relationships, reassigning of staff to acute treatment instead of chronic care, loss of corporate knowledge, and difficulty of maintaining primary health care outreach teams. Furthermore, high turnover is a significant contributor to the costs of providing primary healthcare in remote communities, with one study assessing the cost at \$21 million

Survey respondents' views on the NT's performance in maintaining an appropriate workforce to manage chronic conditions are summarised in Figure 38 below, with 62 per cent indicating the NT is performing poorly and 62 per cent indicating things are getting worse in this area.

¹⁷³ NT Department of Health, Chronic Conditions e-Learning Review Report, 2019, p21.

¹⁷⁴ Zhao et al. (2018), cost impact of high staff turnover on primary care in remote Australia, Australian Health Review 43(6) 689-695, p1.

Figure 38 | Survey results regarding recruiting, developing and retaining an appropriate workforce



A range of ideas for improvement were suggested

Several ideas for improvement in recruitment and retention of staff were suggested during consultations. These included:

- providing more training opportunities (for example, in self-care, resilience, and preparation for remote work) and support to undertake them (for example, permitting short absences)
- having more permanent positions
- recruiting staff from the communities that they service
- improving working conditions, such as flexible and culturally appropriate work arrangements.

Some also highlighted the importance of robust systems and processes to enable the provision of continuity of care and retention of corporate knowledge despite high turnover. The development of a long-term retention strategy for nurses in remote communities was also suggested.

These suggestions are backed by recent literature on the NT health workforce, which indicate priorities for workforce planning and development to address. This includes strengthening education and career pathways for remote health work, for example by conducting education in remote areas; supportive work environments in terms of clinics, housing, ICT and transport; and individual and family support through adequate remuneration, professional development, and time off.¹⁷⁵ There is a need to tailor retention strategies for local community and staff, given the amount of variation in health centres across the Territory.¹⁷⁶

Figure 39 overleaf presents a case study illustrating NT PHN's transition to a place-based approach to outreach services. The case study was provided by NT PHN.

¹⁷⁵ Wakerman et al. Remote health workforce turnover and retention: what are the policy and practice priorities? *Human Resources for Health* (2019) 17:99, p5-6.

¹⁷⁶ Russell et al. Health workforce turnover, stability and employment survival in remote NT health centres 2004-2015, 15th National Rural Health Conference 2019, p1.

Figure 39 | Case study: Transition to a place-based approach to outreach services¹⁷⁷

Northern Territory PHN (NT PHN) receives funding from the Australian Government for the commissioning of outreach health services in the NT, predominantly through the Medical Outreach Indigenous Chronic Disease Program. The aim of the program is to increase access to a range of health services, including expanded primary health care for Aboriginal and Torres Strait Islander people, in the prevention, detection, treatment and management of chronic conditions. The program provides mainly allied health services to more than 80 communities across the NT.

Traditionally, the outreach program was coordinated and administered by NT PHN, acting as a central agency. While this centralised model had some efficiencies, it had limited scope to be locally integrated and responsive to the needs and preferences of communities and health services, including ACCHOs, TEHS and CAHS. Further, the model was not aligned with NT PHN's more recent Commissioning Policy that ensures that "where possible, NT PHN contract Aboriginal-specific health programs and services through ACCHOs". Subsequently, in 2019 the program commenced a transition to a regional 'place-based' approach to the governance, planning, delivery and evaluation of outreach services. This work included:

- Establishing regional governance committees comprising ACCHOs and government health services to plan, monitor and manage risks to the program
- Developing a more equitable resource distribution model based on illness population, remoteness and community size
- Co-designing regional outreach service models that are responsive and integrated with existing models of Comprehensive Primary Health Care (CPHS)
- Introducing new commissioning arrangements that give service providers the flexibility to directly employ and/or contract outreach providers of their choosing.

Early benefits of the transition to the new regional outreach service models include:

- Cost efficiencies through utilising local providers, employing directly and job-sharing positions with other health services in the region
- Increased capacity to coordinate outreach and clinic services
- Increased flexibility to respond to changing and/or emerging community needs
- Increased capacity to manage risk through regional governance arrangements.

A specific example of these changes is the direct contracting of two of the three ACCHOs in the Katherine region to provide outreach services. As a preliminary result, the Katherine region has seen an increase in service delivery of 4.8 per cent in comparison to previous quarters. Under a similar transition in the East Arnhem region, there has been an increase of 14.8 per cent in service delivery.

Regional models of outreach health services continue to evolve as they are refined to meet the needs of their communities. The Central Australia region is undertaking a joint project to identify innovative models of outreach for the ACCHOs. This is being progressed with the support of NT PHN and a new model is expected to commence from 1 July 2020. NT PHN continues to support each region to improve integration, efficiency and health outcomes.

Figure 40 below provides a case study illustrating successful strengthening of the remote workforce in the NT through investment in a combination of governance, communication, supervision channels, support for workers, and clear roles and professional identity. This case study is based on a paper summarising an evaluation by the Menzies School of Health Research on the Remote Alcohol and Other Drugs workforce.¹⁷⁸

¹⁷⁷ Frendin, J., Buckley, L., Mayers, D., & Rory, A. (2015). What works with an Indigenous workforce: an evaluation of the remote AOD workforce.

¹⁷⁸ Jennifer Frendin, Lauren Buckley, Diane Mayers, Asman Rory, What works with an Indigenous workforce: an evaluation of the remote AOD workforce (2015), 13th National Rural Health Conference.

Figure 40 | Case study: NT Remote Alcohol and Other Drugs (AOD) Workforce¹⁷⁹

The Australian government funded Northern Territory Remote AOD Workforce Program aims to support and strengthen an AOD workforce which is sustainable, culturally appropriate and can effectively address AOD issues in communities as part of government primary health care services or Aboriginal Community Controlled Health Organisations. The Program consists of a Program Support Unit and community-based local Aboriginal workers (where possible) across the NT. The Program Support Unit is situated in Darwin and Alice Springs that provides program direction, external clinical supervision, mentoring, training, workforce development, and administration. The development of the program model included partnerships between senior clinicians and researchers experienced in Aboriginal mental health and substance misuse, and widespread consultation to capture local plans and priorities.

What enabled the success of the AOD workforce?

The model has effectively supported a more stable workforce in local communities. It has also contributed to the accessibility of evidence-based services for people affected by AOD. Some of the factors leading to this effectiveness include:

- **good governance**, with a dedicated clinical governance framework developed by the Program Support Unit which articulates roles, and responsibilities, and many mechanisms for accountability
- **robust, systematic communication**: channels facilitating regular communication between the Program Support Unit and the workers, and between the workers (for example, teambuilding activities, twice yearly forums, and professional development opportunities throughout the year)
- **regular clinical supervision** by independent supervisors with relevant AOD skills and experience, providing an ongoing and structured way to review work practices, receive guidance, and access support in stressful circumstances
- **support and technical assistance** provided by the Program Support Unit
- **clear roles and identity as AOD workers**, with self-recognition and recognition by others for their role as health professionals.

The impact of the workforce for communities

The evaluation of the program found that it had increased the capacity of the primary health care services to respond to AOD issues locally. All workers were providing a service to people that previously had limited access to AOD services, through a mixture of community and client/family-based work. The program improved access to AOD services for people in remote communities by:

- increasing the willingness of health professionals to conduct AOD screening in a primary health care setting
- establishing new and strengthened referral networks and partnerships with other local service providers
- providing support and transport for people wishing to leave their communities to access detoxification and rehabilitation services
- increasing willingness to address AOD issues among difficult to reach people and their families
- providing consistent, supportive follow up for those returning from treatment.

The Workforce also has a suite of resources including assessment and intervention tools ('Yarning' tools), short films and a relapse prevention guide and community development manual.

6.7.2 Extent to which outcome in program logic has been achieved

6.7.2.1 The workforce has seen some improvements, with a need for sustained focus on retention and workforce planning

The program logic specified the following outcome for this key action area: "an appropriately skilled workforce in prevention and management of chronic conditions is employed." This outcome has been partly achieved. Stakeholders pointed to specific examples of improvement in recruitment of staff in areas such as education and health promotion. However, retention is an ongoing challenge, especially in remote communities with a high degree of reliance on temporary or visiting staff. There has been a significant

¹⁷⁹ Frendin, J., Buckley, L., Mayers, D., & Rory, A. (2015). What works with an Indigenous workforce: an evaluation of the remote AOD workforce.

increase in Aboriginal medical and nursing staff in the NT Health workforce, accompanied by a decline in AHPs. There are also a range of professional development and training opportunities which could be better made use of by addressing real and perceived barriers to their access (for example, lack of time to use e-learning courses). Continued efforts in workforce planning will be required to address these challenges.

6.7.3 Extent to which assumption in program logic has been substantiated

6.7.3.1 Ongoing workforce planning plays an important role in effective recruitment and retention

The program logic made the following assumption for this key action area: "Sound workforce planning and development will provide effective strategies for recruitment and retention of a skilled workforce."

Workforce planning remains a key focus in the NT Health Workforce Strategy, which commits to implementing new ways of working; planning for future models of care and service demands; reducing overtime and reliance on locum or agency contractors; and mitigating the impact of an ageing workforce.

The NT Health Workforce Strategy also includes actions spanning recruitment, retention, and development of staff.¹⁸⁰ A series of initiatives have been undertaken to help reduce workforce turnover, including improving training, development and support for nurses; offering more flexible employment contracts; increasing remuneration; and restructuring nursing classifications.¹⁸¹

It is not possible within the evidence base for the evaluation to attribute improvements discussed in Sections 6.7.1 and 6.7.2 to the NT Health Workforce Strategy or other such initiatives; however, improvements have occurred in some areas (particularly recruitment) and ongoing workforce planning will play an important role in achieving continuing improvements.

6.8 Key action area 7: Information, communication and disease management systems

Key action area 7 focuses on information, communication and disease management systems. Organising information for quality clinical care involves the use of tools such as disease registers, care plans, recall systems, follow up systems, intake and appointment booking systems that operate in an efficient, timely and accessible manner. It also includes ensuring appropriate information is available for people with chronic conditions and community members regarding the prevention and management of chronic conditions.¹⁸²

The influence of technology in improving chronic care includes decision support tools, helping professionals to work together in more coordinated and seamless ways, enhancing the interface between health and non-health sectors, and sharing up to date information with health professionals and community members.¹⁸³ Embedding clinical decision support and reporting into information systems supports best practice, reduces variation in clinical practice and prompts regular follow up with clients.¹⁸⁴

¹⁸⁰ NT Government, NT Health Workforce Strategy 2019-2022.

¹⁸¹ Zhao Y, Russell DJ, Guthridge S, et al. Costs and effects of higher turnover of nurses and Aboriginal health practitioners and higher use of short-term nurses in remote Australian primary care services: an observational cohort study. *BMJ Open* 2019;9, p2.

¹⁸² NT Department of Health. NT Chronic Conditions Prevention and Management Strategy 2010-2020, p22.

¹⁸³ NT Department of Health. NT Chronic Conditions Prevention and Management Strategy 2010-2020, p31.

¹⁸⁴ Australian Commission on Safety and Quality in Health Care (2018) Best practice primary and secondary preventative interventions in chronic disease in remote Australia, p22.

Over the past decade, there have been investments in a range of technologies and platforms across the NT.¹⁸⁵

- **PCIS**, a system to support provision of primary health care, including care plans for clients requiring chronic and preventative care. It is used by many rural and remote health clinics, which use it for fully electronic health records, as well as some prisons, juvenile detention facilities, Police Watch Houses and other facilities.
- **Communicare**, a patient information platform for community health providers, used in the NT by a range of ACCHOs.
- **My eHealth Record**, a secure electronic system for clients who are on PCIS or Communicare, to give consent for their records (summary medical information) to be shared between participating health providers.
- **Community Care Information System (CCIS)**, funded by NT Health to provide patient records and care planning for primary health care urban services, mental health, alcohol and other drugs, palliative and aged care.¹⁸⁶
- **Secure Electronic Messaging Service (SEMS)**, which ensures that specific information regarding clinical referrals can be communicated electronically securely between service providers, assisting in seamless care when managing patients' transition from GPs or health centres to specialist or hospital outpatient services.
- **Acacia**, a new digital health system being developed for use across NT Health services, which aims to replace multiple existing legacy systems and provide digital health records to health professionals at point of care.¹⁸⁷
- **SA-NT Datalink**, established in 2009, enables research, policy development and evaluation by providing a linking service for population-based data held by government agencies and other organisations.¹⁸⁸The SA-NT Datalink, established in 2009, which enables research, policy development and evaluation by providing a linking service for population-based data held by government agencies and other organisations.¹⁸⁹

The program logic specified the following outputs, outcome and assumption for this key action area:

- **Output 1:** Population health reporting and communication about chronic conditions are in place.
- **Output 2:** All health care providers have access to electronic client health information systems.
- **Output 3:** Contemporary information management (IM) and ICT support the coordination and integration of care.
- **Outcome:** IM and ICT enable timely access to appropriate chronic conditions prevention and management services.
- **Assumption:** State of the art information management, information and communication technology is effective and efficient in the delivery of high-quality chronic conditions prevention and management.

This section presents findings about the extent to which these were observed in practice. These findings are summarised in Table 32 below.

¹⁸⁵ Australian Government Department of Health, Aboriginal and Torres Strait Islander Health Performance Framework 2012, Technical Appendix—Data development—The Northern Territory (NT).

¹⁸⁶ Dialog Information Technology website profile of the NT Department of Health, accessed 28 April 2020 at <https://www.dialog.com.au/portfolio/department-of-health-nt/>.

¹⁸⁷ NT Government Digital Territory Strategy website, accessed 28 April 2020 at <https://digitalterritory.nt.gov.au/action-plan/build-and-configure-the-acacia-digital-health-system>.

¹⁸⁸ SA-NT Datalink website, accessed 2 March 2020 <https://www.santdatalink.org.au/>

¹⁸⁹ SA-NT Datalink website, accessed 2 March 2020 <https://www.santdatalink.org.au/>

Table 32 | Performance of the Strategy in key action area 7

Element of program logic		Finding
Output	Population health reporting and communication about chronic conditions are in place.	Population health reporting and communication are in place in primary health care settings. However, they are not easily accessible outside of these settings (for example, to policy teams). There is no regular outward facing reporting for the public.
	All health care providers have access to electronic client health information systems.	All health care providers have access to PCIS, Communicare or an equivalent system. Implementation and extension of these systems, and the introduction of My eHealth Record, has facilitated information sharing between government health providers and ACCHOs.
	Contemporary IM and ICT support the coordination and integration of care.	While there are ongoing difficulties in information sharing, there have nonetheless been improvements. It is likely this has supported the coordination and integration of care, although evidence of this is limited.
Outcome	IM and ICT enable timely access to appropriate chronic conditions prevention and management services.	Technology has enabled substantial improvements in access to care, via telehealth, for example. However, stakeholders identified numerous requirements and challenges that need to be addressed for the full benefits of telehealth to be realised.
Assumption	State of the art information management, information and communication technology is effective and efficient in the delivery of high-quality chronic conditions prevention and management.	While there have been advancements in technology, it is unclear what effect these have had on the quality of chronic conditions prevention and management. Reporting and communication on population health are largely in place for health services, and there have been improvements in information sharing between health services, but the evidence-base for the evaluation was limited in regard to the effects of these changes. There is clearer evidence for the benefits of telehealth, (for example, in improving access to care).

Table 33 lists the indicators the evaluation framework included for this key action area and how they were measured for this report. Analysis of these indicators along with other data and literature has provided the evidence base for this section.

Table 33 | Evaluation indicators for key action area 7

Indicator name	Measure used	Type
Number of people enrolled in NT shared electronic health record	Number of people enrolled in My e-Health	Quantitative
Number of telehealth, teleconference and other information technologies used to deliver care	Number of occasions of service provided via telehealth	Quantitative

Clinical decision support tools	Consultation themes regarding strategic initiatives that promote and support tools used for information sharing, and the outcomes of these initiatives	Qualitative
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6.8.1 Extent to which outputs in program logic have been realised

6.8.1.1 Population health reporting and communication are in place for health professionals and to a more limited extent for the public

Regarding reporting and communicating about population health, the Strategy's implementation plan refers to:

- Disseminating data reports that are appropriate for use across the health sector to address findings, plan strategies and guide planning.¹⁹⁰
- Developing regular reports about population health data including morbidity, mortality and chronic condition profiles.¹⁹¹
- Sharing infographics with health professionals and community members.¹⁹²

Reporting and communication on population health are in place in primary health care settings, such as through the Chronic Conditions Management Program Reporting, NT AHKPIs, nKPIs, and Service Delivery Agreements. However, not all policy teams have access to these reports.

Population health reporting and communication occurs on a more limited basis to the public through public releases of the nKPIs and reports such as the NT Burden of Disease Study.¹⁹³ The public can also request access to additional data from the Department.¹⁹⁴ It is unclear to what extent information has been communicated to consumers using infographics, beyond those which consumers could access in publicly available reports.

6.8.1.2 Health care providers have access to electronic client health information systems

Most health care providers have access to one or more of:

- Communicare, which is accessible to ACCHOs¹⁹⁵
- PCIS, which is accessible to government-run remote primary health care services and prison
- CCIS, which is accessible to government-run urban primary health care services
- a range of systems used by private GP practices, such as Medical Director, Best Practice and Genie.¹⁹⁶

Stakeholders generally agreed there had been improvement in individual client information systems. For example, the Chronic Conditions Management Model reporting (including monthly patient recall lists, quarterly traffic light reports and six-monthly trend reports, as described in Section 6.3) is based on data obtained from PCIS. Another example is improvements to information sharing through the NT-level My eHealth Record and the Commonwealth-level My Health Record.

¹⁹⁰ NT Department of Health, NT Chronic Conditions Prevention and Management Strategy 2010-2020: Implementation Plan 2014-2016.

¹⁹¹ NT Department of Health, NT Chronic Conditions Prevention and Management Strategy 2010-2020: Implementation Plan 2017-2020.

¹⁹² NT Department of Health, NT Chronic Conditions Prevention and Management Strategy 2010-2020: Implementation Plan 2017-2020.

¹⁹³ NT Department of Health, NT Burden of Disease Study, Fatal Burden of Disease and Injury, 2004-2013, accessed 15 March 2020. <https://digitallibrary.health.nt.gov.au/prodjspsui/bitstream/10137/1278/1/Northern%20Territory%20burden%20of%20disease%20study%20Fatal%20burden%20of%20disease%20and%20i....pdf>

¹⁹⁴ NT Department of Health, Research: Data access, updated 7 Dec 2019 <https://health.nt.gov.au/professionals/nt-health-research/data-access>

¹⁹⁵ NT Department of Health, NT Chronic Conditions Prevention and Management Strategy Annual Report 2011, Darwin, 2012.

¹⁹⁶ NT Department of Health, NT Chronic Conditions Prevention and Management Strategy Annual Report 2011, Darwin, 2012.

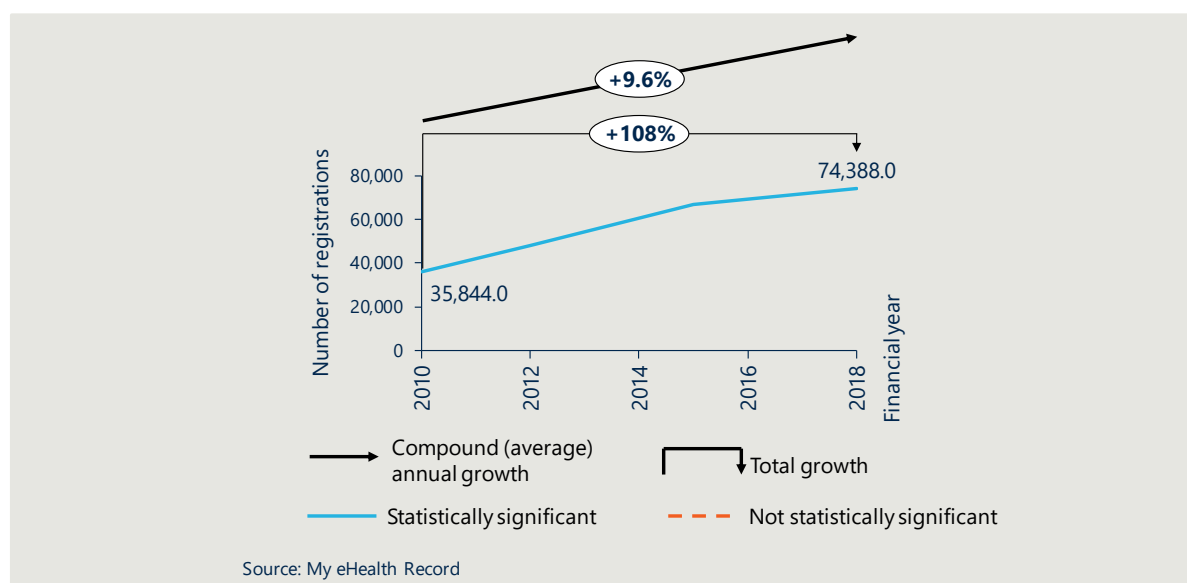
Many stakeholders noted the forthcoming implementation of Acacia with anticipation (and some scepticism). One concern raised was that it would not communicate with the system used by ACCHOs (Communicare). Another was how suitable Acacia would prove to be for primary care, compared to acute care.

6.8.1.3 While fragmentation between IT systems continues to present challenges, information sharing appears to have improved

Stakeholders in all locations expressed frustration about the number and fragmentation of IT systems and the difficulty of sharing information between government and ACCHO sectors. For example, many referenced the incompatibility between the electronic client health information systems used in the government sector (PCIS, CCIS and Caresys) and the ACCHO sector (Communicare). This reportedly makes it difficult to access records, due to the need to transmit them via other methods such as fax or email, and increases the risk of missing important information.

However, stakeholders in most locations recognised that, while sharing information is still difficult, it has nonetheless improved. For example, My eHealth Record enables health services across the NT to access information stored in PCIS and Communicare as well as the Community Care Information System and the CareSys Hospital Information System (depending on clients providing consent for this). From 2010 to 2018, the number of consumers registered for My eHealth Record increased by 108 per cent, from 35,844 to 74,388 (as shown in Figure 41). Other changes that occurred over this period included the extension of PCIS to cover health services offered in prisons, watch houses and youth detention centres in locations across Darwin, Alice Springs and Katherine, and the extension of Communicare to all ACCHOs.

Figure 41 | Consumers registered for NT My eHealth Record, 2010-2018 (financial years)¹⁹⁷



Information sharing is an important enabler of providing continuity of care, and coordinated and integrated care, such as by enabling patients to store their information in one place and share it between different providers.¹⁹⁸ One example is disease registers, such as the NT rheumatic heart disease register,

¹⁹⁷ Data provided by NT Department of Health.

¹⁹⁸ Chronic Diseases Network, Twenty-first Chronic Diseases Network NT Conference - Integrated Care: Healthy Child to Healthy Living, Conference Program and Abstracts, retrieved 17 March 2020 https://health.nt.gov.au/data/assets/pdf_file/0006/457134/CDN-Conference-Program-2017.pdf

which monitors people with rheumatic heart disease to facilitate ongoing support and reduce recurrences of acute rheumatic fever.¹⁹⁹

While there is limited direct evidence, stakeholders indicated that health systems in the NT have evolved to include features that support integration and coordination of care. For example, PCIS was recently enhanced to include a combined care plan for people with multiple chronic conditions.²⁰⁰

6.8.1.4 Decision support tools can assist in delivering quality care

The evaluation framework included decision support tools as an indicator for key action area 7 on information, communication and disease management systems. These tools can support health staff to deliver evidence-based, best practice health services. They can also contribute to consistency and continuity of care in areas of high staff turnover.²⁰¹

PCIS includes decision support tools intended to improve health professionals' practice, such as a calculator that produces a cardiovascular risk assessment score.²⁰² Another decision support tool in use is NT PHN's HealthPathways website, which enables primary care clinicians to walk through patient diagnosis, management and local referrals during consultations with consumers.²⁰³ These were not explicitly discussed in consultations.

The main decision support tool discussed was the CARPA Standard Treatment Manual. There is high awareness of the manual. Stakeholders indicated that it has been useful in setting expectations of care for chronic conditions.

6.8.2 Extent to which outcome in program logic has been achieved

6.8.2.1 Technology, particularly telehealth, is supporting the coordination and integration of care

This section focuses on telehealth, as this was often raised in consultations as an example of technology supporting integration and coordination of care. Other systems were also mentioned as improvements in technology, including computer-generated recalls and health check templates, the use of RiskMan to learn from errors, unique patient identifiers, and point of care testing.

Use of telehealth has rapidly increased

The evaluation framework for the Strategy included a quantitative indicator for telehealth (as part of key action area 7) on the basis that such technologies improve access to care, particularly specialist care. Telehealth is generally viewed as beneficial when correctly embedded into patient care. The benefits include enabling greater access to specialists in remote communities at a lower cost, thereby enabling greater care.²⁰⁴

The use of telehealth has increased dramatically since 2013, as shown in Figure 42 below:

¹⁹⁹ NT Government, Rheumatic heart disease, updated 22 Mar 2019 <https://nt.gov.au/wellbeing/health-conditions-treatments/rheumatic-heart-disease>

²⁰⁰ Schmidt, B., Smith, J. D., & Batty, K, Best practice primary and secondary preventative interventions in chronic disease in remote Australia, Sydney: ACSQHC. 2018
https://pure.bond.edu.au/ws/portalfiles/portal/27161929/Best_practice_primary_and_secondary_preventative_interventions_in_chronic_disease_in_remote_Aust.pdf

²⁰¹ NT Department of Health. Evaluation Framework for the Chronic Conditions Prevention and Management Strategy 2010-2020, 2015.

²⁰² Schmidt, B., Smith, J. D., & Batty, K, Best practice primary and secondary preventative interventions in chronic disease in remote Australia, Sydney: ACSQHC. 2018
https://pure.bond.edu.au/ws/portalfiles/portal/27161929/Best_practice_primary_and_secondary_preventative_interventions_in_chronic_disease_in_remote_Aust.pdf

²⁰³ NT PHN website, 'NT HealthPathways', accessed 2 Mar 2020 <https://www.ntphn.org.au/healthpathways>

²⁰⁴ AMSANT, Telehealth, retrieved 17 March 2020 <http://www.amsant.org.au/telehealth/>

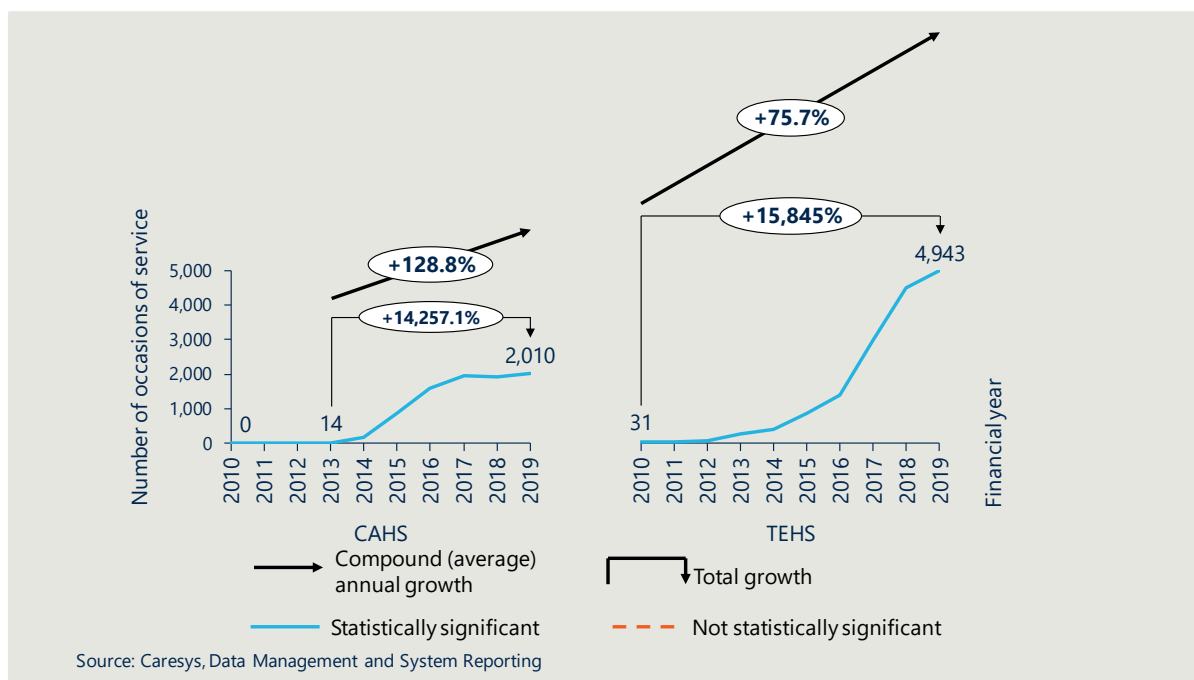
- For CAHS, there was a large and statistically significant increase from 14 telehealth occasions in 2013 to over 2,000 in 2019.
- For TEHS, there was a large and statistically significant increase from 31 telehealth occasions in 2010 to nearly 5,000 in 2019.

There have also been increases in:

- The number of locations from which it is offered, from just Darwin in 2009-10, expanding to, Palmerston, Katherine, Nhulunbuy, Alice Springs and Tennant Creek in 2018-19.²⁰⁵
- The number of services for which it is available, which now include cardiac, orthopaedic, haematology, oncology, dermatology, urology and specialist burn services (the latter provided by South Australia Health).²⁰⁶

Increased professional development opportunities are another useful outcome from telehealth; for example, health professionals are using the telehealth network to participate in professional development activities.²⁰⁷

Figure 42 | Total telehealth occasions of service by health service, 2009-10 to 2018-19 (financial years), NT



Enablers for telehealth have included funding, intergovernmental and intersectoral collaboration, workforce capacity, professional development and technology

Telehealth was introduced in the NT in 2010, under the Australian Government’s Digital Regions Initiative, which sought to improve health services in remote areas. It has since expanded as a result of several initiatives, including (but not limited to):

²⁰⁵ Caresys, Data Management and System Reporting.

²⁰⁶ AMSANT, NT Telehealth Success, retrieved February 2020. <https://www.amsant.org.au/nt-telehealth-success/>

²⁰⁷ AMSANT, Telehealth, retrieved 17 March 2020. <http://www.amsant.org.au/telehealth/>

- an NT Government project that extended its use to make the Patient Assistance Travel Scheme (PATS) more financially sustainable²⁰⁸
- NT Government funding for Telstra Health to improve infrastructure, including connecting new locations to the network, as part of the National Telehealth Connection Service²⁰⁹
- NT Government, Telstra Health and AMSANT piloting telehealth at Anyinginyi Health Aboriginal Corporation in Tennant Creek and the Santa Teresa Health Centre near Alice Springs.²¹⁰

Another enabler that contributed to the success of these efforts was additional staff; for example, the PATS sustainability project included dedicated positions to support changes in work practices, which were found to be “crucial to the project’s success”.²¹¹ Stakeholders also identified improving internet coverage as an enabler.

The evaluation of the PATS – Telehealth Project in 2015 identified that telehealth delivered a \$1.1 million saving in travel costs to the government, improved the attendance rate of patients attending appointments compared to standard hospital outpatient clinics, and reduced extensive, inconvenient travel time for patients living in remote communities.²¹²

Telehealth’s effectiveness depends on enabling infrastructure and engagement

Stakeholders highlighted a range of enablers that must be in place to fully realise the benefits of telehealth, including:

- **Staff capacity** – There should be enough staff available to support the use of telehealth in communities. While telehealth can reduce the need for some staff, such as specialists, to be locally available, it also places a burden on staff on the ground to coordinate telehealth meetings, take clients through them and sometimes to debrief or explain the session to consumers and families afterwards.
- **Patient engagement** – Establishing a connection between the staff using telehealth and the patient can be an important part of effective care. Some stakeholders offered examples of health professionals not involving patients in consultations (for example, specialists using telehealth sessions to speak mostly to the health professionals who are supporting the patients, often in technical terms). Stakeholders also noted that telehealth was less useful for initial consultations and more useful for follow-up appointments.
- **Coordinating care** – Providing patient-centred care for people with multiple comorbidities can mean balancing the need to coordinate many specialists via telehealth against the experience of seeing one generalist physician.

There were also enablers identified that are arguably not in fact specific to telehealth:

- **Consistent application** – For telehealth to reach its full potential, it should be consistently applied across services and locations where it would be useful. Stakeholders cited instances where telehealth was not used where it could have been, such as patients unnecessarily travelling from the Barkly Region to Alice Springs for appointments.
- **Culturally appropriate and/or in language**– The effectiveness of telehealth can be increased through the use of language and the provision of the service in a culturally appropriate way. Issues identified by stakeholders included language barriers, resistance on the part of consumers and the need for enough physical space for family groups in the telehealth facility.

²⁰⁸ NT Department of Health, Evaluation of the PATS-Telehealth Project December 2015, retrieved 17 March <http://www.amsant.org.au/wp-content/uploads/2016/03/PATS-Telehealth-Report-FINAL.pdf>

²⁰⁹ Pulse+IT Magazine, NT telehealth trial has saved time, money and improved access to care February 2016, retrieved 17 March 2020. <https://www.pulseitmagazine.com.au/news/australian-ehealth/2928-nt-telehealth-trial-has-saved-time-money-and-improved-access-to-care>

²¹⁰ AMSANT, NT Telehealth Success, retrieved February 2020 <https://www.amsant.org.au/nt-telehealth-success/>

²¹¹ NT Department of Health, Evaluation of the PATS-Telehealth Project December 2015, retrieved 17 March <http://www.amsant.org.au/wp-content/uploads/2016/03/PATS-Telehealth-Report-FINAL.pdf>

²¹² AMSANT, NT Telehealth Success, retrieved February 2020 <https://www.amsant.org.au/nt-telehealth-success/>

- **Others** – Telehealth depends on dedicated facilities, ongoing maintenance, critical infrastructure such as internet connection, education and support in how to use the systems.

A case study on the successful development of telehealth for a diabetes clinic in the Top End is shown in Figure 43 below.

Figure 43 | Case study: A regular telehealth clinic for clients with diabetes in the Top End

NT Health's remote primary health care services in the Top End and the Royal Darwin Hospital set up a telehealth video pilot in 2014. It chose to run the pilot through an existing regular telephone case conference clinic for diabetes. This teleconference involved an endocrinologist calling from Darwin, a remote Top End diabetes educator, and remote medical practitioners, discussing patients who were not present during the teleconference (with the patient's consent). The telehealth pilot changed the model to include patients in the discussion, creating a regular weekly telehealth diabetes clinic with patients present, and conducted by video.

The process highlighted the following factors which were important to address:

- Telehealth should be appropriately resourced at the primary care end to be effective. During the telehealth clinic, the participating clinics tended to be larger, as they had the resourcing required to find patients, secure a room, and capacity for an extra staff member to be present with the patient during the clinic (including some which had a dedicated telehealth coordinator). Initially, there was lower usage of the telehealth conference from smaller clinics. However, resourcing for the remote coordination has increased over time, given the overall cost savings for the health service.
- It can be difficult to engage teenagers and young people in the telehealth conferences. An important enabler is an existing relationship between at least one of the health professionals in the conference and the young person, particularly, if the professional is living or working in the community or area where the patient is from, bringing knowledge of the community and people's lives to the discussion.
- Other important enablers for the telehealth service to work effectively included means of communicating across cultural and language barriers, and the need for technology and a working internet connection.

The evaluation of the pilot found that the model was working well, with positive feedback from the health professionals involved. The model was formally adopted as policy and practice by NT Health in the Top End. The Royal Darwin Hospital also moved many services to a telehealth model, including establishing a new role of Telehealth Coordinator and a weekly Endocrine Telehealth clinic.

6.8.3 Extent to which assumption in program logic has been substantiated

6.8.3.1 High quality IM and ICT contribute to the efficiency and effectiveness of care

The program logic made the following assumption for this key action area: "State of the art information management, information and communication technology is effective and efficient in the delivery of high-quality chronic conditions prevention and management."

While there have been advancements in technology, it is less clear what effect these have had on the quality of chronic conditions prevention and management. Reporting and communication on population health are largely in place for health services, and there have been improvements in information sharing between health services, but the evidence-base for the evaluation was limited in regard to the effects of these changes.

There is clearer evidence for the benefits of decision support tools such as the CARPA manual, which stakeholders said was useful in setting expectations of care for chronic conditions, and telehealth, which has improved access to care for more people in remote locations, particularly to specialists, and reduced travel costs.

6.9 Key action area 8: Continuous quality improvement

Key action area 8 focuses on CQI. CQI aims to improve services through continually repeated cycles of change that use data to “identify areas for action, develop and test strategies, and implement service re-design”, even when things are already going well. It works best when it is embedded as part of core business,²¹³ and when consumers are involved in the process.²¹⁴

The NT has had a CQI Strategy in place since 2009 to support Aboriginal primary health care, supported by the Australian Government, NT Government, AMSANT and others. CQI is coordinated across the NT by two CQI Coordinators based at AMSANT and a team of CQI Facilitators employed by local ACCHOs and the Department of Health.²¹⁵ CQI is also guided by the National Framework for Continuous Quality Improvement in Primary Health Care for Aboriginal and Torres Strait Islander People 2018-2023. Research indicates that policy-level commitment to strengthening CQI is an important enabler for it to gain traction, as has been the case in the NT.²¹⁶

CQI can work alongside accreditation of health services to ensure quality standards and better patient outcomes.²¹⁷ These can be mutually reinforcing: some accreditation criteria specify that CQI processes should be in place,²¹⁸ while CQI can help health services reach standards required for accreditation. Accreditations in primary health care include those provided by the Royal Australian College of General Practitioners, Quality Improvement Council and International Organisation for Standardisation.²¹⁹ As an example, the Standards of General Practices include a specific module on quality improvement.²²⁰

The program logic specified the following outputs, outcome and assumption for this key action area:

- **Output 1:** CQI Strategy is implemented by health care providers.
- **Output 2:** CQI process established and practised by health care providers.
- **Output 3:** Role of CQI in informing and improving evidence-based service delivery is established as part of core business.
- **Outcome:** CQI is embedded in day-to-day practice for improved care delivery.
- **Assumption:** CQI is everybody’s business.

This section presents findings about the extent to which these were observed in practice. These findings are summarised in Table 34 below.

Table 34 | Performance of the Strategy in key action area 8

Element of program logic		Finding
Output	CQI Strategy is implemented by health care providers.	Stakeholders were widely aware of the CQI Strategy and the initiatives it supported.

²¹³ National Aboriginal Community Controlled Health Organisation, National Framework for Continuous Quality Improvement in Primary Health Care for Aboriginal and Torres Strait Islander People 2018-2023, p4.

²¹⁴ National Aboriginal Community Controlled Health Organisation, National Framework for Continuous Quality Improvement in Primary Health Care for Aboriginal and Torres Strait Islander People 2018-2023, p13.

²¹⁵ NT CQI Strategy, accessed 27 April 2020 at <http://www.amsant.org.au/wp-content/uploads/2019/08/NT-CQI-STRATEGY.pdf>.

²¹⁶ Bailie et al. Impact of policy support on uptake of evidence-based continuous quality improvement activities and the quality of care for Indigenous Australians: a comparative case study. *BMJ Open* 2017;7, p8.

²¹⁷ National Aboriginal Community Controlled Health Organisation, National Framework for Continuous Quality Improvement in Primary Health Care for Aboriginal and Torres Strait Islander People 2018-2023, p4.

²¹⁸ National Aboriginal Community Controlled Health Organisation, National Framework for Continuous Quality Improvement in Primary Health Care for Aboriginal and Torres Strait Islander People 2018-2023, p5.

²¹⁹ National Aboriginal Community Controlled Health Organisation, National Framework for Continuous Quality Improvement in Primary Health Care for Aboriginal and Torres Strait Islander People 2018-2023, p25.

²²⁰ National Aboriginal Community Controlled Health Organisation, National Framework for Continuous Quality Improvement in Primary Health Care for Aboriginal and Torres Strait Islander People 2018-2023, p5.

	CQI process established and practised by health care providers.	A range of CQI activities have been established and practised by health care providers.
	Role of CQI in informing and improving evidence-based service delivery is established as part of core business.	Stakeholders agreed that CQI has informed evidence-based service delivery as part of core business.
Outcome	CQI is embedded in day-to-day practice for improved care delivery.	CQI is embedded in core service delivery across the NT, with established activities and processes implemented by health care providers.
Assumption	CQI is everybody's business.	There is a high level of awareness of and commitment to CQI. The NT CQI Strategy provides an agreed model and has widespread support.

Table 35 lists the indicators the evaluation framework included for this key action area and how they were measured for this report. Analysis of these indicators along with other data and literature has provided the evidence base for this section.

Table 35 | Evaluation indicators for key action area 8

Indicator name	Measure used	Type
CQI approach for improved quality of chronic care	Consultation themes regarding strategic initiatives that promote and support CQI activities, and the outcomes of these initiatives	Qualitative
Staff training in CQI activities	Consultation themes regarding staff training in CQI, the capacity of the CQI workforce, service provider participation in CQI collaboratives, the use of data and evidence-based tools for CQI activities	Qualitative

6.9.1 Extent to which outputs in program logic have been realised

6.9.1.1 Stakeholders were widely aware of the CQI Strategy and the initiatives it supported

Two of the major components of the CQI Strategy were the establishment of a CQI Steering Committee and the engagement of CQI workforce (including facilitators and coordinators) to report to the Steering Committee and ensure the CQI model was implemented.²²¹ Stakeholders demonstrated awareness of the implementation of both components by health care providers as part of core service delivery.

Stakeholders noted the workforce and investment put in place to enable this implementation. Positive comments were made in several locations about the CQI Facilitators and Coordinators; for example:

- the way they have driven ground-level change
- their collaborative relationships with health professionals
- their regular visits in which they work with staff to develop innovative improvements to service delivery

²²¹ Allen and Clarke Policy and Regulatory Specialists Limited. Evaluation of the Northern Territory CQI Investment Strategy, retrieved March 2020
[https://www1.health.gov.au/internet/main/publishing.nsf/Content/B3227C1498890166CA257D8E001532C9/\\$File/CQISummary.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/B3227C1498890166CA257D8E001532C9/$File/CQISummary.pdf)

- their positions in the ACCHO sector and how this has helped bring the government and ACCHO sectors together.

Stakeholders had strong awareness and uptake of CQI professional development opportunities including forums, the regular CQI collaboratives and committees, which are reportedly valuable for developing a shared understanding of CQI, providing feedback to health professionals and discussing issues. Some noted that attendance at CQI forums was encouraged by their managers and within their workplace. There were also references to services applying for CQI accreditation.

6.9.1.2 The CQI process is practised by health care providers and informs and improves evidence-based service delivery

Stakeholders agreed that CQI initiatives are widely established and practised by health care providers and that this has been a major improvement in the NT in recent years. A strong awareness of the CQI process was demonstrated at all levels within and across the sector, in particular around the CQI workforce and accreditation. CQI was not mentioned by many survey respondents, but those who did mention it did so positively, often stating it has been widely established in services. Stakeholders mentioned that a strength of the NT's approach to CQI is the face to face component, where facilitators engage with services in their communities and in periodic forums.

Some potential barriers to CQI were identified, including competing demands and a lack of time and resources distracting attention from it, and a lack of engagement from some clinic managers and staff; for example, focusing on the process rather than the outcome. A few stakeholders also raised concerns that CQI as it is currently practised may focus too much on clinical measures (such as increasing the number of health checks), and that it should also focus on other issues such as addressing staff turnover.

A case study from the National Framework for Continuous Quality Improvement in Primary Health Care for Aboriginal and Torres Strait Islander People is summarised in Figure 44 below. This provides an illustration of how CQI can influence better service delivery at both the individual service level and for the broader health system.

"CQI has been embraced across all health services"

"CQI processes are happening across the NT in all areas affecting chronic conditions and there is a lot of good work occurring."

Figure 44 | Case study: AMSANT supporting and facilitating CQI in health services²²²

The NT's CQI Strategy provides an agreed model to embed CQI across both ACCHOs and Aboriginal primary health care services delivered by the NT Government. AMSANT's CQI team provides a range of support, including assisting services to interpret and analyse clinical data and facilitating meetings with teams and managers to identify strengths and opportunities for improvement. This case study illustrates the CQI process by providing a case study of AMSANT's work with a health centre.

AMSANT worked with a health centre to schedule a team review of the local NT AHKPI report. They encouraged the health centre manager to have as many staff as possible attending the meeting, as this can be a powerful way to get wide input in interpreting the KPI data and develop ideas and changes, which are pragmatic and achievable, to improve services. Ahead of the meeting, staff became familiar with the NT AHKPI report, as it was shown on the noticeboard and discussed in meetings.

The meeting was led by a CQI Facilitator supported by the AMSANT CQI Coordinator. The facilitation aimed to review the data to identify where the service was doing well and where it could improve, based on trends and benchmarking against the NT average. The numbers were not taken at face value only: staff had the opportunity to tell the story behind each KPI, including recent developments in the community, the effect of staffing levels, and how the weather and road closures affected the accessibility of the service in the community.

Next, the team chose one KPI to focus on for improvement, namely underweight children. Using a CQI tool (called Plan-Do-Study-Act, or PDSA), they identified a specific goal for this KPI, which was to increase the number of children in the community who had their weight measured. The team developed five ideas for how the service could improve that KPI using the PDSA. Narrowing down further, the team chose one idea to trial, which was working with the local school to weigh children over the course of the next month. (While this example focuses on child health, the same process is applied to the prevention and management of chronic conditions, using KPIs and other clinical data to identify system or process gaps.) Follow up actions from this activity could be incorporated into the next CQI cycle. In this way, the CQI process creates gradual, realistic changes over time that can add up to significant improvements.

Because AMSANT and CQI facilitators work across many services across the NT, they are in a strong position to see broader issues across primary health care, and work to address them at the systemic level. For example, these issues could become themes raised at the annual NT CQI Collaborative, where learnings are disseminated, and issues considered through a CQI lens. AMSANT and facilitators also deliver training in CQI principles and tools, and support and mentor the PHC services and staff through face to face workshops or in-service sessions.

6.9.2 Extent to which program logic outcome has been achieved

6.9.2.1 CQI is embedded in day-to-day practice and has improved care delivery

Stakeholders indicated that CQI initiatives are embedded in day-to-day practice and have contributed to improving care delivery across the NT, and also toward accreditation of health services. This is supported by research showing that the NT has become a leader in the use of CQI tools (indicated by clinical audits through the Audit and Best Practice in Chronic Disease programme) since 2005.²²³ A case study providing three examples of CQI improving care delivery is provided in Figure 45.

CQI was one of two key action areas in which stakeholders generally thought the NT was performing best (along with early detection and secondary prevention), and many noted it is an important enabler for chronic conditions prevention and management.

However, it was also suggested that improvements from CQI may begin to slow, as services have tended to target easier improvements first (the 'low hanging fruit'), and more difficult improvements will require additional capacity for change management. Another factor which could influence CQI was a change to Commonwealth

"It has become normal business for services to be looking at their data... it links work that's happening in lots of different strategies."

²²² National Aboriginal Community Controlled Health Organisation, National Framework for Continuous Quality Improvement in Primary Health Care for Aboriginal and Torres Strait Islander People 2018-2023, p19-21.

²²³ Bailie et al. Impact of policy support on uptake of evidence-based continuous quality improvement activities and the quality of care for Indigenous Australians: a comparative case study. *BMJ Open* 2017;7, p6.

funding for primary health care which moved CQI from having specified funding to being incorporated into core block funding. This may make it more difficult for services to maintain identified CQI positions due to competing priorities for use of funds. However, one stakeholder noted that AMSANT continues to have identified funding for CQI support and ongoing implementation of the NT and national CQI strategies.

Figure 45 | Case study: CAHS embedding CQI in day-to-day practice to improve care delivery²²⁴

CAHS teams undertake CQI processes with PDSA tools. CAHS emphasises the flexibility of the process, where there can be one cycle of improvements, or several with small changes and improvements, or restarting with a fresh approach when an attempted initiative did not work. There are three illustrations of the process provided by CAHS below.

Filling a gap in services for children under five

One of CAHS's communities in Barkly identified a decrease in immunisation rates and a rise in anaemia rates in children, based on their review of the NT AHKPIs. The team attributed this to a lack of child health support, identifying that workload for maintaining care of the under-five population was too great for the existing team to manage and they needed the assistance of a qualified and dedicated child health nurse to assist with Healthy Under Five Checks.

A plan was developed to lobby for more child health hours within their service, using the PDSA format to document and implement this change. The actions included the use of the monthly Child Health Traffic Light report as a guide for declining immunisation rates and anaemia rates, re-orientating all staff to the child health traffic light reports and the importance of all staff participating in the Healthy Under five Checks, well children's checks.

This effort was successful, and they now have a dedicated child health nurse for 2 weeks a month. There has been a significant increase in immunisation rates, and anaemia rates have dropped. The Child Health Traffic Light and NTAHKPI reports has shown an overall improvement in health of the children under five in the community.

Improving hand washing in a Central community

A Central Australian health service had observed local residents not washing their hands effectively when they attended the clinic. The clinic staff attributed this to a gap in health literacy, and prioritised it because of its potentially high benefits for health across the community, including for skin, eyes, kidneys and gastric health.

The team developed a plan using the PDSA tool. The actions included developing posters about hand washing in local language with pictures created by local staff and their local community workers to teach people how to wash their hands when they came into the clinic.

While this is an ongoing project in the community, early outcomes have been very positive, with staff noticing that more community members are washing their hands effectively.

Improving continuity of care with high staff turnover

One Central Australian health service had a high proportion of agency staff who only stay for a few weeks at a time and small number of permanent staff. The high turnover of agency staff had an impact on the quality and consistency of care for clients with chronic diseases and other vulnerabilities.

The team used the PDSA to document the issue, develop a plan including the review of progress. A key action was to implement a system of portfolio folders set up within the health centre to be passed from staff member to staff member. This enabled them to hand over care for clients to staff more effectively, despite the agency staff being in community for short periods of time.

After some initial setbacks, this system has been functioning smoothly for over 12 months and feedback from agency staff has been very positive. Most importantly, the continuity of care of clients has improved greatly since its inception.

²²⁴ National Aboriginal Community Controlled Health Organisation, National Framework for Continuous Quality Improvement in Primary Health Care for Aboriginal and Torres Strait Islander People 2018-2023, p19-21.

6.9.3 Extent to which program logic assumption has been substantiated

6.9.3.1 There is a high level of awareness of and commitment to CQI

The program logic made the following assumption for this key action area: “Continuous quality improvement is everybody’s business”. This reflects the importance of having commitment and involvement in CQI in all parts of the primary health care system, with NT Health services, ACCHOs, policymakers and others taking an active interest in promoting the uptake of CQI. This assumption has been well-substantiated by the evidence collected through this evaluation, given the high levels of awareness of CQI and its importance across stakeholders, and the increase in CQI activity across the sector over the last decade. In particular, the NT CQI Strategy provides an agreed model across both ACCHO and government-run services and has widespread high-level support.

6.10 Goals and principles

The Strategy included a set of goals and principles. As noted in Section 22, due to limited time with stakeholders, in discussions the primary focus was on the key action areas (including the outcomes in the program logic), the quantitative and qualitative indicators and the evaluation questions. Stakeholders were not explicitly asked about the goals and principles. However, the outcomes for each key action area outlined in the evaluation program logic were developed to address the goals of the Strategy. For most, if not all of the goals and principles, highly relevant information was collected through the consultations.

This section briefly addresses the extent to which goals were achieved and principles were satisfied, using the evidence gathered through the evaluation. The goals are addressed first, in Table 36 below. Each goal includes reference to the relevant sections in the report, including the related key action areas as defined by the program logic in the evaluation framework.

Table 36 | Findings for each goal listed in the Strategy

Goal	Finding	Sections regarding this
1. Promote and support healthy lifestyles and wellbeing in the community	Organisations have collaborated to promote healthy environments and address modifiable risk factors including tobacco smoking, alcohol and physical exercise. There have been improvements in some risky behaviours and environmental factors, in some locations.	See key action area 2 for more information.
2. Reduce the prevalence of risk factors in the population	There have been some reductions in risk factors in some locations. Overall alcohol consumption has decreased. Rates of adult obesity appear to have reduced. There is evidence of a reduction in tobacco consumption, but this may not extend to remote communities.	See key action area 2 on risk factors, and 7 on information and technology for more information.
3. Prevent or delay the onset of chronic conditions	The ability of health service providers to identify and monitor disease markers appears to have improved. The rate of potentially preventable hospitalisations due to chronic conditions increased less in the NT than nationally while remaining higher.	See key action area 3 on early detection and secondary prevention, 4 on self-management, and 7 on information and technology for more information.
4. Maximise the wellbeing of those living with chronic conditions	There is some evidence of improvements in chronic conditions management (for example, high uptake of care plans including GP management plans and team care arrangements).	See Overarching Trends and key action areas 4 on self-management, 5 on care for chronic conditions,

		and 6 on workforce for more information.
5. Reduce health disparities among different population groups with regard to the conditions and risk factors in the framework	There is limited evidence that the health disparities among different population groups with regard to the conditions and risk factors in the framework have reduced. In some respects, such as smoking rates, health disparities appear to have worsened.	See Overarching Trends and key action areas 1 on social determinants, 2 on risk factors, 3 on early detection and secondary prevention, 7 on information and technology, and 8 on CQI for more information.
6. Reduce the gap in life expectancy associated with chronic conditions between Aboriginal and non-Aboriginal people	There has been a statistically significant increase in life expectancy for non-Aboriginal men and women. There was also a large increase for Aboriginal men, and a small increase for Aboriginal women, but these were not statistically significant. Relative to national trends, life expectancy has improved in the NT for most population groups (excluding Aboriginal women).	See Overarching Trends for more information.
7. Increase self-management	There are some examples of successful self-management support initiatives; however, various stakeholders reported the self-management capacity of consumers and staff was low. Evidence suggests that self-management is not yet fully embedded in care and understanding of the concept varies.	See key action area 4 on self-management, 5 on care for chronic conditions, and 6 on workforce for more information.
8. Improve collaboration and integration across all sectors	Intersectoral collaboration and partnerships (for example, to address social determinants) are evident to varying degrees across the NT. Stakeholders generally agreed that more collaboration is needed.	See key action area 1 on social determinants for more information.

The Strategy's principles were intended to underpin all aspects of the Strategy and provide impetus for continuing improvements in the NT. Given the overlap between some of these principles and other parts of the Strategy, they have not all functioned as principles in practice.

Findings for each of the principles listed in the strategy are shown in below. Where the principles overlap with other parts of the Strategy (such as the key action areas), these have been grouped and reference made to the appropriate section of the report.

Table 37 | Findings for each principle listed in the Strategy

Principle	Finding	Reference
Principles which do not directly overlap with other parts of the Strategy		
Demonstrating effective leadership and governance	This principle focuses on clinical and management leadership and community engagement at the health service level. This was not often raised by stakeholders during consultations. Examples of leadership and clinical governance include the Renal Network ²²⁵ and the Cancer	See key action area 1 on social determinants, and Implementation section for more information.

²²⁵ NT Department of Health, NT Renal Services Strategy 2017-2022
https://digitallibrary.health.nt.gov.au/prodjspsui/bitstream/10137/1438/3/DoH_RenalServices_Strategy.pdf

	Care Network. ²²⁶ An example of leadership in community engagement is CAHS Primary Health Care recruiting a community engagement officer to establish local health advisory groups.	
Working in partnership and collaboration	There is evidence of working in partnership within the health sector (for example, the increase in team care arrangements) and between the health and non-health sectors (for example, to address social determinants), however in general more effort was needed in all these areas.	See key action area 1 on social determinants for more information.
Focusing on the early years of life	The Strategy supported strategies addressing the early years of life, including Great Start, Great Future: NT Early Years Strategic Plan 2016-2020; The Best Opportunities in Life: NT Child and Adolescent Health and Wellbeing Strategic Plan 2018-2028; and Starting Early for a Better Future: Early Childhood Development in the Northern Territory 2018-2028.	See key action area 1 on social determinants for more information.
Addressing services for Aboriginal populations	This principle refers to Aboriginal community control of, and cultural security in the provision of, primary health care services. There has been significant collaboration with ACCHOs and initiatives to improve cultural security. Examples include the Local Decision Making policy, Pathways to Community Control Co-operative Framework and the NT Health Aboriginal Cultural Security Framework. Some stakeholders identified cultural inappropriateness as an ongoing barrier to care.	See Introduction and Implementation sections, and key action area 1 for more information.
Addressing social and emotional well being	Addressing social and emotional wellbeing does not appear to have been a major focus of the Strategy. The third implementation plan included an action regarding implementation of a model of social and emotional wellbeing programs. Several stakeholders suggested this should be a greater focus in the next strategy.	See key action area 1 on social determinants, 3 on early detection, and 6 on workforce for particular examples.
Promoting respectful and committed person centred care	Stakeholders describe ongoing difficulties in achieving integrated, coordinated, patient-centred care. There is more work to be completed on the cultural appropriateness of health services.	See key action area 5 on care for people with chronic conditions for more information.
Providing evidence-based care	There is evidence that high-quality care is provided in the NT. The CARPA Standard Treatment Manual enables health professionals including AHPs, nurses and doctors to provide uniform and evidence-based primary care for Aboriginal patients. ²²⁷ Stakeholders agree that CQI has informed evidence-based service delivery as part of core business.	See key action areas 5 on care for people with chronic conditions, and 7 on ICT for more information.
Promoting integrated multidisciplinary care	There have been improvements in integrated multidisciplinary care. The number of team care arrangements has been increasing, and there are	See key action areas 3 on early detection and secondary prevention, and

²²⁶ NT Department of Health, NT Cancer Care Strategy 2018-2022
<https://digitallibrary.health.nt.gov.au/prodjspsui/bitstream/10137/7486/1/NT%20Health%20Cancer%20Care%20Strategy%202018-2022.pdf>

²²⁷ Centre for Remote Health, CARPA Standard Treatment Manual, 7th edition, 2017
<https://healthinonet.ecu.edu.au/healthinonet/getContent.php?linkid=592687&title=CARPA+standard+treatment+manual%3A+a+cli+nic+manual+for+primary+health+care+practitioners+in+remote+and+Indigenous+health+services+in+central+and+northern+Australia>

	examples in the case studies of integrated and multidisciplinary care. However, many stakeholders believed that silos and lack of communication were ongoing challenges in providing integrated care, as well as complex funding arrangements and reporting requirements which make integrated care more difficult.	4 on self-management for more information.
Providing care coordination by multidisciplinary teams	There have been instances of progress in increasing care coordination, such as case studies of Aboriginal people being employed in care coordination roles to build relationships. Challenges include lack of coordinator roles, comorbidities in consumers, and increasing specialisation.	See key action area 5 on care for people with chronic conditions for more information.
Promoting effective organisational and service delivery systems	The evaluation consultations did not produce evidence that this is explicitly being addressed by the Strategy. However, CQI is embedded in core service delivery across the NT, with established activities and processes implemented by health care providers.	See key action area 7 on ICT, and 8 on CQI for more information.
Demonstrating commitment to monitoring, outcomes and evaluation	There is widespread use of data for monitoring in health services, such as the NT AHKPIs and nKPIs. CQI is also widely embedded in services, which involves systems to monitor outcomes and effectiveness and improve the quality of care; stakeholders are aware of the CQI Strategy and show commitment to the monitoring and improvement process.	See key action area 8 on CQI for more information.

Principles which directly overlap with other parts of the Strategy

Addressing the social determinants of health	Awareness of social determinants is widespread. Attempts at addressing these were varied, with the extent of intersectoral collaboration and partnerships varying between locations. There is evidence of improvement in some social determinants (for example, housing, employment, education and food security), but in general performance was poor to begin with and hence remains comparatively low.	See key action area 1 on social determinants for more information.
Promoting active self-management support	There are some examples of successful self-management support initiatives, however various stakeholders reported the self-management capacity of consumers and staff was low. Evidence suggests that self-management is not yet fully embedded in care and understanding of the concept varies.	See key action area 4 on self-management for more information.
Encompassing prevention across the continuum of care	The Strategy included initiatives to address improved prevention across the continuum of care, including primary, secondary and tertiary prevention. Significant activity has been undertaken in each of these areas.	See key action areas 2 on risk factors, 3 on early detection and secondary prevention, and 5 on care for people with chronic conditions for more information.

6.11 Attribution

This section discusses the extent to which the observed impact and outcomes can be attributed to the Strategy.

The Strategy's target outcomes and impact have been partly realised

There is some evidence of improvements in Territorians' health and wellbeing. This is most evident in the improvements in life expectancy relative to national trends for Aboriginal men and for non-Aboriginal men and women.

There is evidence of improvements in chronic conditions prevention and management over this period. For example, awareness of social determinants is widespread, overall alcohol consumption and tobacco smoking have reduced, use of telehealth has rapidly increased, and CQI is embedded in the day-to-day practice of care.

There is also evidence of ongoing challenges; for example, limited improvement in the social determinants, persistently high rates of tobacco smoking in remote communities, varying understanding of self-management, and declining numbers of AHPs. Stakeholders also raised concerns about the consistency with which detection translates into management, the extent to which care is integrated and coordinated and high rates of workforce turnover.

There was limited evidence of unintended outcomes from the Strategy

Some stakeholders suggested that activities such as health checks and care plans are sometimes performed in a tokenistic way (for example, to meet KPIs). Similar concerns were raised about CQI activities. However, this evaluation also identified evidence that these initiatives are beneficial, and it is to be expected that there will be variation in how staff engage with them.

Some stakeholders suggested that, while the Strategy's strong focus on social determinants is a positive, there are some people who at times overemphasise them or focus on them as a justification for poor performance or lack of improvement in health outcomes.

The Strategy appeared to have greatest influence in the government sector

The evaluation framework assumed government and non-government stakeholders:

- use the Strategy as a guide to adopt evidence-based strategies, directions and actions for chronic conditions service delivery
- willingly and actively participate in developing, monitoring and reporting on the Strategy implementation plans
- continually realign their investments to progress the Strategy.

Consultations conducted for the evaluation suggest these assumptions are reasonable for the Department, TEHS and CAHS. They are more variable in their applicability to other organisations, among which engagement with the Strategy varied. The more positive findings in the mid-term evaluation regarding stakeholders' support for the Strategy suggests there may have been a lessening in engagement over time. This suggests the Strategy was an influence on NT health sector stakeholders, but the extent of its influence varied between government and other organisations and potentially over time.

Other influences on the impact and outcomes observed include major health reforms and the previous strategy

As recognised in Section 5, the Strategy was operating in a rapidly changing environment, which saw major reforms in health service delivery, such as reform of primary health care and the establishment of the Department, TEHS and CAHS as three separate entities. These changes are discussed further in Section 7.1.

Another potential influence on the observed impact and outcomes over the past decade is the previous strategy. Chronic conditions have complex causes, including long-term genetic and intergenerational influences, and it takes a long time for the effects of population health interventions such as those included in the Strategy to become apparent. More generally, it's possible that observed outcomes reflect changes made prior to the Strategy, and that the Strategy's impact will take more than ten years to be realised.

The Strategy had some influence on outcomes, which was more pronounced for government health services

The absence of a counterfactual means it is not possible to disentangle the influence of the Strategy from other influences. The issues considered in this section suggest the Strategy had an influence on chronic conditions prevention and management in the NT over the past decade and that this influence was greatest in the government sector.

7 Improvement to the Strategy

Sections 5 and 6, which respectively focused on the implementation and impact of the Strategy, highlighted aspects of the Strategy that are working well or could be improved. This section considers further evidence on what aspects of the Strategy could be improved and the form it should take, including:

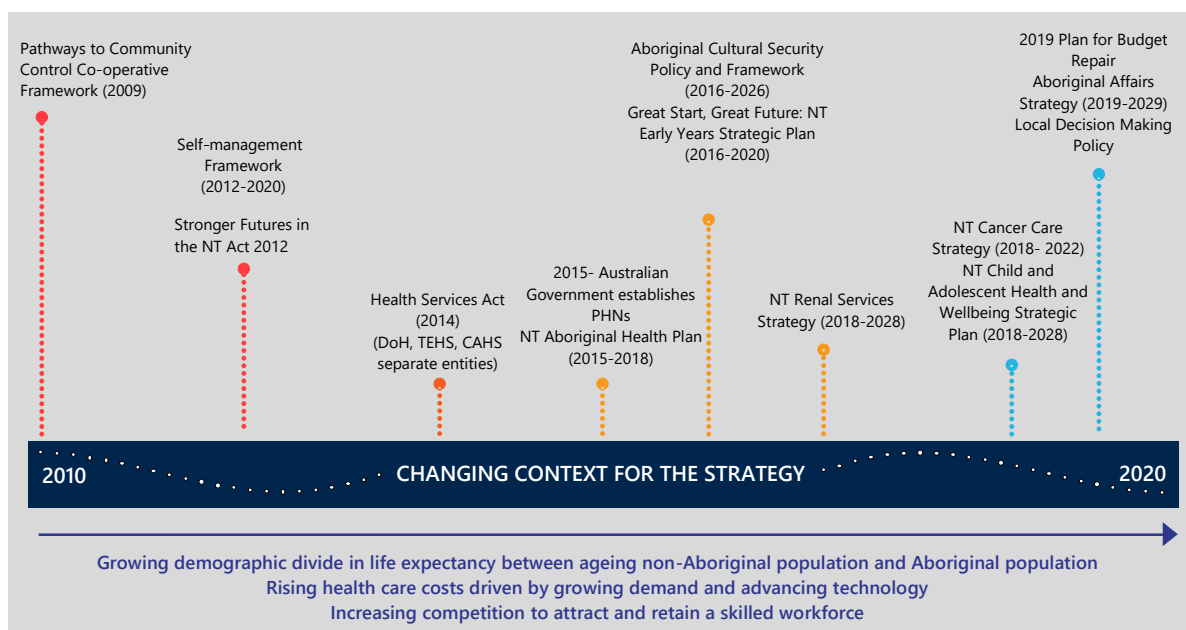
- the context for the Strategy and how it has changed over the past decade
- stakeholders' views on enablers and barriers to effective prevention and management of chronic conditions
- research on comparable jurisdictions' current practices in preventing and managing chronic conditions
- insights from recent research which can inform the next strategy.

Section 2 draws together the evidence considered throughout this report to provide specific recommendations for the next strategy.

7.1 What context does the next strategy need to respond to?

The next strategy will need to consider key population, health and resource trends which will form the context it operates within. These are detailed below (and summarised in Figure 46).

Figure 46 | Timeline demonstrating the changing environment the Strategy operated within



Demography and geography

There are certain characteristics of the NT which are widely known but highly relevant to planning the next strategy and what content it should include. These include the significant geographical barriers in the way of equitable access to health services in the NT. Nearly half of the NT's population lives in remote or very remote areas,²²⁸ which brings challenges in physical access, resourcing, and staffing. The population also has high levels of social disadvantage such as poverty, which is closely related to poorer health outcomes.

²²⁸ NT Health Strategic Plan 2018-2022, p6

<https://digitallibrary.health.nt.gov.au/prodjspsui/bitstream/10137/2729/3/Northern%20Territory%20Health%20Strategic%20Plan.pdf>

There is a demographic divide emerging between the growing young Aboriginal population and considerably younger age profile of Aboriginal Territorians, compared to the non-Aboriginal population which is ageing.²²⁹ The cultural and linguistic diversity within the NT is particularly important to consider in order for health services to be culturally appropriate and effective, especially for Aboriginal people.

Health service delivery

Primary health care, through which most chronic conditions prevention, detection and management are delivered, is the responsibility of a range of health service providers across the NT. Since the current Strategy was drafted, the NT Government has established the Department, TEHS and CAHS as three separate organisations responsible for primary health services. The Commonwealth Government funded NT PHN plays a central role in improving access to health care services for all Territorians by commissioning primary health care services, supporting the primary health care workforce, and enabling integration across acute and primary health care.²³⁰ The 'webbed' nature of primary health care in the NT will only increase with the continuing transition of government health services to ACCHOs under the Local Decision Making policy, the Pathways to Community Control policy, and the NT Health Strategic Plan 2018-2022.

There is also an ongoing tension between the need to resource and invest in acute health services to address more immediate needs, against the need to address future, emerging and current chronic conditions in the population.

Constraints in resources

Public health care accounts for 24 per cent of the NT Government's budget,²³¹ and NT Health accounted for 34 per cent of the NT Government's growth in output appropriation between 2007-08 and 2017-18.²³² This is occurring in the context of tightening fiscal constraints for the NT Government, as specified in the Plan for Budget Repair.²³³

Healthcare costs are rising, driven by growing demand and advancements in technology which provide new and improved services. There is also increasing competition to attract and retain a skilled workforce, which is only intensified in a smaller, diverse and largely remote jurisdiction such as the NT. Costs of providing services are higher when a significant part of the population (particularly the high-needs population for chronic conditions) is dispersed through remote locations.²³⁴

Other strategies and initiatives

There are significant reforms, strategies and initiatives taking place in the NT and nationally which should be considered in developing the next strategy.

The NT Health Strategic Plan 2018-2022 provides the high-level direction for the Department, TEHS and CAHS. This is important to consider as it sets out the existing priorities of government-run health organisations, which the next strategy will seek to influence.

NT Health also has a number of other strategies in place which focus on or are highly relevant to chronic conditions, including the:

- NT Health Workforce Strategy 2019-2022

²²⁹ NT Health Strategic Plan 2018-2022, p6

<https://digitallibrary.health.nt.gov.au/prodjspu/bitstream/10137/2729/3/Northern%20Territory%20Health%20Strategic%20Plan.pdf>

²³⁰ NT PHN. About: What is NT PHN? <https://www.ntphn.org.au/our-organisation>; NT PHN. NT PHN 2018-23 Strategic Plan. <https://www.ntphn.org.au/strategic-plan>

²³¹ NT Government Fiscal Strategy Panel, A Plan for Budget Repair: Final Report (2019), p72

https://treasury.nt.gov.au/_data/assets/pdf_file/0010/683461/Budget-Repair-Final-Report.pdf

²³² NT Government Fiscal Strategy Panel, A Plan for Budget Repair: Final Report (2019), p63

https://treasury.nt.gov.au/_data/assets/pdf_file/0010/683461/Budget-Repair-Final-Report.pdf

²³³ NT Government Fiscal Strategy Panel, A Plan for Budget Repair: Final Report (2019), p63

https://treasury.nt.gov.au/_data/assets/pdf_file/0010/683461/Budget-Repair-Final-Report.pdf

²³⁴ NT Health Strategic Plan 2018-2022, p6

<https://digitallibrary.health.nt.gov.au/prodjspu/bitstream/10137/2729/3/Northern%20Territory%20Health%20Strategic%20Plan.pdf>

- NT Mental Health Strategic Plan 2019-2025
- The Best Opportunities in Life – Northern Territory Child and Adolescent Health and Wellbeing Strategic Plan 2018–2028
- NT Renal Services Strategy 2017 to 2022
- NT Health Aboriginal Cultural Security Framework 2016 to 2026
- NT Rehabilitation Strategy 2017 to 2021
- NT Cancer Care Strategy 2018 to 2022.

Other initiatives across the NT are relevant to the next strategy, and in particular to the social determinants and modifiable risk factors. These are important to consider because the next strategy will need to link and align with these strategies, but without duplicating them. Relevant examples include:

- The Local Decision Making policy, particularly the shift of services including health care to ACCOs, as this has implications for capacity and resourcing of ACCHOs; community engagements and partnerships; changing NT Health operations; and information sharing between NT Health, ACCHOs and communities.²³⁵
- The Everyone Together Aboriginal Affairs Strategy 2019-2029, which includes an objective to improve access to quality, culturally responsive health services through building effective partnerships with Aboriginal people and ACCHOs.²³⁶
- Northern Territory PHN 2018-23 Strategic Plan, with its focus on strengthening integration and coordination in the NT health system, and optimising funding to meet present and future need.

There are also national strategies and directions which should play a role in influencing the strategy's development. This will align the NT's direction with larger-scale work being undertaken at a national level. These include the:

- National Aboriginal and Torres Strait Islander Health Plan 2013-2023
- National Strategic Framework for Chronic Conditions
- My Life My Lead: Opportunities for strengthening approaches to the social determinants and cultural determinants of Indigenous Health: Report on the national consultations December 2017
- Australia's National Digital Health Strategy.

7.2 What will enable or impede further improvement in chronic conditions prevention and management?

During consultations, stakeholders were asked to identify the enablers and barriers to improving prevention and management of chronic conditions. This section summarises this feedback. The most commonly cited barriers were the inverse of these enablers.

Social determinants

Improvement in social determinants and environmental factors were the most commonly cited enablers for improvement in chronic conditions. In broad priority order, the specific factors raised were housing, employment and economic participation, education, food security, and water security.

While many stakeholders identified social determinants as an important enabler, many also said they were limited in their ability to influence these issues (as they were largely outside the scope of their roles,

²³⁵ NT Government, Local Decision Making Framework Policy, p15 https://ldm.nt.gov.au/_data/assets/pdf_file/0006/791358/ldm-policy.pdf

²³⁶ NT Government, Everyone Together Aboriginal Affairs Strategy 2019-2029, p16 https://dcm.nt.gov.au/_data/assets/pdf_file/0010/799219/everyone-together-aa-strategy.pdf

organisations or the health sector as a whole). Several spoke about the need for intersectoral or whole-of-government approaches to address social determinants.

Collaboration

A common theme was the need to collaborate between organisations and sectors at all levels, from leadership to middle management and to staff on the ground. Many stakeholders spoke about the need to break down silos and improve planning, coordination and communication, both within the health sector and with other sectors such as housing and education. Suggestions for collaboration included creating stronger connections between organisations, participating in interagency forums, sharing resources, and monitoring systems across sectors.

Workforce capacity and continuity

Many stakeholders highlighted addressing health workforce issues as critical to enabling effective prevention and management of chronic conditions. The factors most commonly raised included:

- **Capacity** – This was cited often as existing staff capacity was less than that required to meet demand.
- **Retention** – High staff turnover leads to a lack of continuity in care and variable professional experience, expertise and cultural competency in addressing chronic conditions.
- **Recruitment** – Stakeholders identified improvements in recruitment compared to retention. However, it was identified as requiring improvement to enable effective service delivery, particularly the recruitment of local and/or Aboriginal staff for remote communities.
- **Skills and experience** – Stakeholders referred to the importance of having staff with experience in chronic conditions, and the right mix of specialists and generalists in health and related disciplines to meet demands in communities.

Culturally appropriate services and language

Stakeholders at all levels across sectors emphasised the importance of improving the cultural appropriateness of services for effective chronic conditions prevention and management. This includes having education and health promotion activities in first languages, using resources in language, training health professionals in the languages of communities they work in, and more frequent and effective use of interpreters (e.g. by scheduling appointments). Others mentioned involving local communities in decision making and transferring delivery of services to ACCHOs (which aligns with the NT's Local Decision Making policy).²³⁷

Funding

A common theme was the lack of funding and the complexity of funding arrangements for chronic conditions prevention and management. A recurring topic was the perceived imbalance of funding between services for acute care as opposed to prevention and managing chronic conditions, such as health promotion.

In terms of funding arrangements, stakeholders mentioned:

- complexity of funding coming from many different sources
- short term grants or funding cycles which can compromise the effectiveness of initiatives such as prevention programs
- the absence of funding incentives for beneficial services, such as coordinated care or telehealth (e.g. no Medicare payments for handovers between health professionals)
- the importance and influence of Australian Government funding on the NT.

²³⁷ NT Government, Local Decision Making, retrieved 17 March 2020 <https://ldm.nt.gov.au/>

7.3 What insights from current practice in comparable jurisdictions should be considered for the next strategy?

As part of this evaluation, comparable strategies addressing chronic conditions prevention and management, both nationally and internationally, were examined. The goal was to provide context on the evaluation's recommendations for the next strategy for chronic conditions, drawing on the structure and areas of focus of similar strategies. Where strategies focusing specifically on chronic conditions prevention and management were not in place, jurisdiction-wide health and wellbeing strategies were reviewed to provide a current understanding of comparable approaches to health care.

Table 38 below outlines the strategies reviewed for this section.

Table 38 | Strategies from comparable jurisdictions reviewed for current practice

Chronic conditions-specific strategies / strategies with strong emphasis on chronic conditions	Broader public health strategies
Australian Capital Territory (ACT) Chronic Conditions Strategy 2013-2018 ²³⁸	Healthy Canberra: ACT Preventative Health Plan 2020-2025 ²⁴⁴
Centre for Chronic Disease Prevention (Canada) Strategic Plan 2016-2019 ²³⁹	Healthy Tasmania (TAS): Five Year Strategic Plan 2016-2020 ²⁴⁵
Ministry of Health (New Zealand) Long-Term Conditions Outcomes Framework 2017	National Aboriginal and Torres Strait Islander Health Plan 2013-2023 ²⁴⁶
National Strategic Framework for Chronic Conditions ²⁴⁰	New South Wales (NSW) State Health Plan: Towards 2021 ²⁴⁷
Western Australia (WA) Chronic Conditions Self-Management Strategic Framework 2011-2015 ²⁴¹	Queensland (QLD) Health and Wellbeing Strategic Framework 2017-2026 ²⁴⁸
WA Health Promotion Strategic Framework 2017-2021 ²⁴²	South Australia (SA) State Public Health Plan 2019-2024 ²⁴⁹
WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020 ²⁴³	

²³⁸ ACT Government, ACT Chronic Conditions Strategy – Improving Care and Support: 2013-2018,

<https://www.health.act.gov.au/sites/default/files/2019-02/Chronic%20Conditions%20Strategy%202013%20-%202018.pdf>

²³⁹ Public Health Agency of Canada, Centre for Chronic Disease Prevention Strategic Plan 2016-2019,

<https://www.canada.ca/content/dam/phac-aspc/migration/phac-aspc/cd-mc/assets/pdf/ccdp-strategic-plan-2016-2019-plan-strategique-cpmc-eng.pdf>

²⁴⁰ Department of Health, National Strategic Framework for Chronic Conditions, 2017,

[https://www1.health.gov.au/internet/main/publishing.nsf/Content/A0F1B6D61796CF3DCA257E4D001AD4C4/\\$File/National%20Strategic%20Framework%20for%20Chronic%20Conditions.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/A0F1B6D61796CF3DCA257E4D001AD4C4/$File/National%20Strategic%20Framework%20for%20Chronic%20Conditions.pdf)

²⁴¹ WA Department of Health, WA Chronic Conditions Self-Management Strategic Framework 2011-2015,

https://consultation.health.wa.gov.au/strategy/chronic-condition-self-management-programs/supporting_documents/1112_CCSM_Strategic_Framework.pdf

²⁴² WA Department of Health, Western Australian Health Promotion Strategic Framework 2017-2021, 2017

https://ww2.health.wa.gov.au/~/_media/Files/Corporate/Reports%20and%20publications/HPSF/WA-Health-Promotion-Strategic-Framework-2017-2021.pdf

²⁴³ World Health Organization, Global action plan: for the prevention and control of noncommunicable disease 2013-2020, 2013,

https://apps.who.int/iris/bitstream/handle/10665/94384/9789241506236_eng.pdf;jsessionid=5D0CFDA38928F4C4010CC4351B7A20A?sequence=1

²⁴⁴ ACT Government, Healthy Canberra: ACT Preventative Health Plan 2020-2025 <https://health.act.gov.au/sites/default/files/2019-12/ACT%20Preventive%20Health%20Plan%20%20Three%20Year%20Action%20Plan.pdf>

²⁴⁵ Tasmanian Government, Five Year Strategic Plan,

https://www.dhhs.tas.gov.au/_data/assets/pdf_file/0008/224567/Healthy_Tasmania_Strategic_Plan_Web_v8_LR.pdf

²⁴⁶ Australian Government, National Aboriginal and Torres Strait Islander Health Plan 2013-2023,

[https://www1.health.gov.au/internet/main/publishing.nsf/content/B92E980680486C3BCA257BF0001BAF01/\\$File/health-plan.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/content/B92E980680486C3BCA257BF0001BAF01/$File/health-plan.pdf)

²⁴⁷ NSW Health, NSW State Health Plan: Towards 2021 <https://www.health.nsw.gov.au/statehealthplan/Publications/NSW-state-health-plan-towards-2021.pdf>

²⁴⁸ Queensland Health, Health and Wellbeing Strategic Framework 2017 to 2026, updated 12 Mar 2020,

<https://www.health.qld.gov.au/system-governance/strategic-direction/plans/health-wellbeing#obesit>

²⁴⁹ Government of South Australia, State Public Health Plan 2019-2024

Comparable jurisdictions' strategies vary in their approach to chronic conditions prevention and management. The National Strategic Framework for Chronic Conditions articulates a national vision for chronic conditions prevention and management. Around the time that the National Strategic Framework for Chronic Conditions was published, several jurisdictions (including the ACT, WA, NSW and VIC) phased out strategies focused specifically on chronic conditions in favour of strategies focused more broadly on public health and wellbeing. These public health and wellbeing plans vary in the extent to which they emphasise chronic conditions. They all generally:

- take a holistic view of what constitutes health and wellbeing
- recognise health and wellbeing as the primary form of prevention for many chronic conditions
- attempt to address system-wide inefficiencies that affect the healthcare experience for all consumers
- are not specific to any one chronic condition.

All of the strategies (including the National Strategic Framework for Chronic Conditions, National Aboriginal and Torres Strait Islander Health Plan (ATSHP), the World Health Organisation's Global Plan of Action on Social Determinants of Health (WHO) and the current strategies for ACT, NSW, SA, TAS, QLD, VIC and WA) include a focus on social determinants and primary prevention. All strategies emphasise the importance of health system improvement and broader integration and coordination between the health sector and other supporting services. The strategies are not chronic condition-specific, but rather focus on the system barriers and enablers that have the most significant impact on quality chronic conditions prevention and management.

Most of the strategies (excluding VIC and ACT's public health plans) maintain a focus on the importance of early detection and secondary prevention for people with chronic conditions, as well as the provision of high-quality care for all people. Only the chronic conditions-specific strategies highlight the concept of self-management.

This raises the question of whether there is a need to define the specific chronic conditions that should be addressed, when the most significant strategies to improve outcomes for people living with chronic conditions are not necessarily condition specific.

Table 39 | Insights from current practice in comparable jurisdictions

Issue	Insights from current practice in comparable jurisdictions
Social determinants of health	<p>All of the strategies articulate the impact of social determinants on health and wellbeing. They also emphasise the need for whole-of-government action to better integrate systems to address the full spectrum of social determinants. Some of the strategies reinforce this through illustrating and conceptualising the integrated nature of social determinants, showing how complex public health and wellbeing interventions can be. This also highlights the multifaceted nature of chronic conditions prevention and management.</p> <p>Adopting a population-wide perspective on health and wellbeing (and hence prevention) ensures that factors both inside and outside the traditional 'health' realm are considered for their impact on long-term health outcomes. This highlights the importance of well-integrated and connected services across a broad range of systems, both inside and outside the health realm. While addressing all social determinants is not solely the responsibility of the health system, there are levers for change that the health system can focus on. These include advocating to other departments and levels of government, convening relevant interdisciplinary networks and events at a local level, and providing services and care with a holistic, integrated mindset.</p> <p>All reviewed strategies propose to invest in and foster partnerships across a broad range of sectors and organisations to improve integration of services. Integration of</p>

services is highly relevant to effective chronic conditions prevention and management and should be government-led at the system level. Strategies should be aimed at both the Commonwealth Government and local level. For example, the SA State Public Health Plan 2019-2024²⁵⁰ refers to the SA Health in All Policies approach²⁵¹ which “recognises that a new form of governance for health is needed where there is joined-up leadership within governments, across all sectors and between levels of government”. This approach is recognised by the WHO as the “Adelaide Statement” and has been developed and tested in a number of countries.²⁵²

Primary prevention

Each of the reviewed strategies incorporated a major focus on primary prevention of risk factors for chronic conditions. Primary prevention should be viewed in the context of overall societal health and wellbeing as being the best prevention mechanism for chronic conditions. **Almost all of the reviewed strategies highlighted a focus on healthy lifestyles**, and how this can be achieved from a whole-of-population perspective. There is a natural link between quality public health as a primary preventative measure and addressing social determinants to improve health outcomes. For example, the VIC strategy prioritises increasing active living (physical inactivity being a major risk factor for a range of chronic conditions), which is impacted by social determinants such as neighbourhood and precinct planning, socio-cultural norms and the accessibility of public transport. Therefore, strategies that address primary prevention and improving social determinants are most effective when they are viewed in combination.

Some jurisdictions’ strategies outline specific actions to **address risk factors that are particularly prevalent** or cause particular harm among their populations. For example, the ACT and WA strategies set out a range of initiatives to address tobacco use and unsafe alcohol consumption, while the TAS strategy also highlights initiatives for increasing healthy eating and physical activity.

Early detection and secondary prevention

Early detection and secondary prevention are only a focus of strategies with a strong chronic conditions focus. The more general public health plans maintain a primary prevention lens, emphasising good population health and wellbeing as the best preventative measure against chronic conditions.

Interventions are aimed at **improving models of care to become increasingly consumer centred**. For example, this includes empowering individuals living with chronic conditions to take accountability for their own health and understand the importance of early detection. Empowering health services to take responsibility for supporting individuals and improving screening and timely detection for those at high risk is also emphasised. Policies and practices for Aboriginal and Torres Strait Islander people should be specific and culturally appropriate to empower these communities to take responsibility for their health in their own manner.

Improved system integration is also a focus. Strategies propose that partnerships between services and greater involvement of the primary care sector increase the likelihood of picking up ‘at risk’ individuals early through conducting testing across a broad range of services. Greater integration of services is also more likely to improve information sharing, naturally working to fill evidence gaps across the health system that inform where priorities should be in terms of early detection.

Strategies also suggest that governments could **allocate a greater proportion of funding to early detection methods**. This would increase the availability of early detection interventions and opportunistic screening. Strategies also stress the need

²⁵⁰ Government of South Australia, State Public Health Plan 2019-2024, <https://www.sahealth.sa.gov.au/wps/wcm/connect/d18380e5-6792-4cdd-a193-08d80fd47df4/FINAL+State+public+Health+Plan+2019-2024.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-d18380e5-6792-4cdd-a193-08d80fd47df4-n5iLkpR>

²⁵¹ Government of South Australia, ‘South Australian Health in All Policies Initiative: Case Study’, June 2013. <https://www.sahealth.sa.gov.au/wps/wcm/connect/f31235004fe12f72b7def7f2d1e85ff8/SA+HiAP+Initiative+Case+Study-PH%26CS-HiAP-20130604.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-f31235004fe12f72b7def7f2d1e85ff8-n5hAxq8>

²⁵² World Health Organization. 2010. Adelaide Statement on Health in All Policies: moving towards a shared governance for health and well-being https://www.who.int/social_determinants/hiap_statement_who_sa_final.pdf

for early detection methods to be cost-effective to increase the likelihood of consumers and services prioritising these interventions.

Self-management

The concept of self-management is only highlighted in chronic conditions-specific strategies. It is closely linked with efforts that aim to empower individuals to take responsibility for their own health, as well as strategies that help health services proactively support individuals living with chronic conditions. The ATSIHP outlines the importance of Aboriginal and Torres Strait Islander people taking control of their health and self-care within their culture and place. For health services, this means that **care must be culturally appropriate, and 'control' is handed back to these communities** to increase the likelihood of effective self-management.

Individuals are more likely to effectively manage their own care if they feel they have the specific advice and support they need from their health provider. This is driven by **care that is provided in partnership with the individual, which is in contrast to traditional care-giving roles** that disempower people to take responsibility for their own health.

It may be useful for the NT to define what is meant by 'self-management' in the local context – that is, **define what active engagement of individuals living with chronic conditions looks like over their entire care journey**. This is distinct from 'self-management support', which are the supporting techniques and strategies that services can implement to help people practice self-management and be actively engaged in their care.

Care for people with chronic conditions

The National Strategic Framework for Chronic Conditions, ATSIHP, NSW State Health Plan, and former ACT Chronic Conditions Strategy address principles of high-quality care for people living with chronic conditions. There is a common recognition that total prevention is unlikely, and when an individual inevitably requires care, that care should at least be consumer-led and organised around the individual's level of need (and noting each person's needs will be different).

Strategies articulate that care should be organised around the principles of the 'right care, in the right place, at the right time'. That is, care is coordinated, person-centred, appropriate and accessible. **'Team-based care' is key to providing high quality clinical care for people with complex needs, however this is reliant on an effective interdisciplinary model**. Interventions aimed at improving this model include building collaborative and trusting relationships between services to strengthen continuity of care and critical information sharing.

Well-coordinated, person-centred, appropriate care must be underpinned by a well-resourced health workforce. **The health workforce must be able to communicate effectively across the health system** and into non-health sectors to provide true interdisciplinary team-based care. This requires strong leadership from the health system to influence coordinated and integrated service delivery models and approaches for the benefit of people living with chronic conditions.

High quality care for people living with chronic conditions must maintain a holistic focus. All reviewed strategies outline the interplay of social determinants and the range of factors that contribute to an individual's state of health. Person-centred approaches that assess the 'whole person' are more likely to ensure a high-quality standard of care is provided.

Workforce planning and development

Workforce planning and development is generally acknowledged to be an enabler of strategic priorities. Strategies mostly focus on aspects of the workforce that are within the direct control of the health system such as recruitment, retention and building capacity to better support people living with chronic conditions. However, it is acknowledged that **one of the most significant workforce issues is the maldistribution of workers and services, with critical shortages of skilled workers** in some rural and remote areas.

Development of a skilled workforce through training and education is an initiative common across the majority of strategies. Education includes at both the undergraduate and health professional level. The health system can work to influence an undergraduate curriculum that emphasises chronic conditions

prevention and management through **co-designed curriculum development**. Specialist continuing professional development is also a critical initiative to ensure health professionals remain current in this field. Some strategies also articulate an opportunity for **upskilling the workforce in sectors outside of health** that have an overlapping role in chronic conditions prevention and management.

Information, communication and disease management systems

Information and communication systems are also generally seen as enablers of strategic priorities. Initiatives that fall into this category focus on the use of consistent, quality data and real-time data sharing to enable monitoring and quality improvement. However, data and information systems are seen as distinct from technology.

Technology is seen as one method of improving system infrastructure and structure to enable better integrated care. **Integrated care inherently relies on effective and timely information sharing** and ease of sharing, as well as increased collaboration between clinicians and their patients. This is enabled through technology and instant communication.

Technology can also be viewed as the specific products and tools used to underpin service provision. For example, telehealth as a tool to provide care and advice to the patient in their place of choosing, at a time that suits them. Technology can also refer to **consumer wearables and monitoring systems to improve surveillance and early detection**. Viewing technology as an enabling factor for the improvement of consumer-centred care is especially important for the NT with a large geographic area and need for quality rural and remote services.

Continuous quality improvement (CQI)

All reviewed strategies maintain a strong focus on monitoring, evaluation and CQI. This is in line with the general move towards outcomes reporting across the health sector. CQI activities are viewed as integral to broader system improvement and patient experience, however, are distinct from key strategic priority areas.

CQI activities outlined in the strategies focus on outcomes, with **improvement measured against patient reported outcome and experience measures** (PROMs/PREMs). This relies on authentic patient engagement and feedback, as well as an appropriately skilled workforce who are able to engage in CQI activities. government-led initiatives should continue to foster clinical engagement and clinical champions to drive improvements in patient care across the system.

Strategies outline the need for a focus on a minimum standard of practice and care that is accepted and met across the system. This should be continually reviewed and updated according to best available evidence. However, the translation of knowledge into practice is often delayed, as is the time between health promotion activities and improvements in disease outcomes. **CQI activities should focus on both short-term and long-term outcomes**, with an approach that captures the full range of activities that contribute to health system improvement and chronic conditions outcomes.

7.4 What insights from recent research should be considered for the next strategy?

This section summarises research which could inform the development of the next strategy. It first covers broader themes in addressing chronic conditions, and then insights from the research are detailed for each key action area in Table 39 below.

Research institutions and condition-specific organisations have identified common barriers and enablers to optimal chronic disease prevention and management. The Australian Government Department of Health has implemented a coordinated model of care for people living with chronic conditions through the Health Care Homes program. This program, designed based on best available evidence, is centred around four priorities for optimal care:

- care coordination
- using a multidisciplinary team approach
- workforce capability
- increasing access.

The Menzies School of Health Research identified six priority evidence-practice gaps in chronic illness care:

- follow-up of abnormal findings and review of medication
- adherence to evidence-based current treatment guidelines with support for underperforming health centres
- assessment and support of patient’s emotional wellbeing
- accurate and regular recording of risk factors and interventions, in particular, cardiovascular risk assessment and healthy weight indicators, particularly for health centres with low levels of delivery
- coverage of adult vaccinations, especially for people with chronic kidney disease (CKD), coronary heart disease (CHD) and hypertension (HT)
- development of systems for more effective links between health centres and communities.

The report concluded that the most important barriers and enablers to address these gaps are:

- workforce recruitment and retention
- provision of patient-centred care
- community engagement and participation in service delivery design
- training and development of health centre staff and management.

The Australian Prevention Partnership Centre adopts a ‘systems thinking’ approach – that is, a holistic perspective on the strategies needed to improve chronic conditions prevention across the whole health system. These include:

- being systematic about prevention – transforming sporadic/ad hoc programs and investments in preventative health into a regularised pattern of service delivery
- working across different systems to improve health – working in and with other systems to improve the social determinants
- identifying the settings in which preventative action takes place – understanding the dynamics of the sub-settings in which people live, work and operate for increased effectiveness of interventions
- using systems tools and theories to analyse and improve prevention practice – tapping into methods and ideas that have not been traditionally used in public health, such as engineering, management, maths and economics.

Table 40 | Insights from recent research to inform the next strategy

Issue	Insights from recent research
Social determinants of health	<p>A framework to take action on the social determinants in clinical practice was published in the Canadian Medical Association Journal (CMAJ) in 2016. It articulates a range of health system-led initiatives that can be implemented at the patient, practice and community levels to address inequities in social determinants. These initiatives include:</p> <ul style="list-style-type: none"> • Patient level: supporting patients faced with social challenges by asking about their social history, providing them with advice, and making referrals and facilitating access to local support services.

- Practice level: improving access to services by documenting language preferences of patients, providing interpreter services, extending clinic hours, locating clinics close to where people live and work, offering a welcoming and culturally safe practicing environment, and creating outreach programs / opportunities.
- Community level: engaging in activism to proactively and substantively engage local leaders and other partners in public health initiatives; conducting locally relevant research; and using social determinants data to generate locally relevant evidence.²⁵³

However, the framework also recognises that measures to reduce disparities must be integrated across systems and sectors for maximum effect.

The Victorian Health Promotion Foundation proposes a ‘settings-based’ approach for addressing social determinants inequities. A settings approach reflects the World Health Organisation’s philosophy that addressing all social determinants relies on a system-wide, integrated effort. Instead of viewing social determinants in isolation, they are viewed within the place or social context (the setting) in which people engage in the activity, or in which environmental, organisational and personal factors interact. However, this work also realises that although health promotion activities do work to address social determinants, only a fraction of these activities address the wide-ranging set of social determinants that influence health outcomes.²⁵⁴

Primary prevention

The Australian Prevention Partnership Centre²⁵⁵ have undertaken computational modelling of health and economic benefits of chronic disease prevention interventions to build the case for primary prevention. The modelling produced three priority issues for government-led action to improve primary prevention methods:

1. Smoking behaviour and environmental restrictions (raising the minimum age of purchasing tobacco to 21 years, increasing the compliance of tobacco retailers to minimise tobacco sales to young people, and social marketing that is focused on reducing secondary sharing of tobacco products).
2. The food legislative environment (healthy food policy initiatives, broader healthy food and drink policies in territory-owned venues, healthy sport sponsorship practices, and limiting the impact of unhealthy food and drink marketing in government-controlled settings).
3. Excessive alcohol consumption.

The Australian Commission on Safety and Quality in Health Care (ACSQHC)²⁵⁶ undertook a comprehensive review of best practice primary and secondary prevention services for patients with chronic disease in remote Australia. The report found that the key enablers for successful primary prevention programs include:

- leadership by a community organisation
 - collaboration of several agencies to establish and sustain the programs
 - focus on the social determinants as well as the specific risk factor
 - sustainable funding.
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²⁵³ A Andermann, Taking action on the social determinants of health in clinical practice: A framework for health professionals, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5135524/>

²⁵⁴ VicHealth, Settings for addressing the social determinants of health inequities, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5135524/>

²⁵⁵ The Australian Prevention Partnership Centre, Building a compelling case for prevention, <https://preventioncentre.org.au/wp-content/uploads/2019/04/Completion-Building-the-compelling-case-for-prevention-FINAL.pdf>

²⁵⁶ ACSQHC, Best practice primary and secondary preventative interventions in chronic disease in remote Australia <https://www.safetyandquality.gov.au/sites/default/files/migrated/Best-practice-primary-and-secondary-preventative-interventions-in-chronic-disease-in-remote-Australia-.pdf>

Early detection and secondary prevention

Kidney Health Australia has developed evidence-based key recommendations for chronic disease prevention and management in primary care.²⁵⁷ While the context for recommendations is within the primary care sector, most recommendations span the whole health system, as well as supporting services and sectors. The recommendations are to:

1. Change the funding model to incentivise undertaking the Integrated Health Check for at risk individuals.
2. Deliver integrated interdisciplinary education for health professionals and services that recognises the need for shared care for chronic conditions.
3. Develop digital tools to support decision making and integration of care in general practice.
4. Support nurse-led chronic disease clinics to improve best practice management and coordination of care.
5. Implement community pharmacy initiatives that identify high risk individuals and appropriate referral to primary care.
6. Implement self-management programs that support consumer awareness, skill development and coaching.

The ACSQHC report on best practice interventions in the remote context²⁵⁸ found that secondary prevention services rely on a well organised system of care and effective health information systems to operate most successfully. Best practice secondary prevention interventions also require collaboration across many different agencies, and the use of a common policy framework to manage the system of care for people with established chronic disease.

Self-management

Two interrelated articles published in The Medical Journal of Australia highlight the systemic enablers required for effective self-management practices. The initial systematic review found that self-management and self-management support are key aspects of optimal chronic disease care.²⁵⁹ Best practice programs are most effective if combined with other system-level interventions, such as modifying how the service is delivered. For example, self-management programs are often driven by research groups or independent condition-specific organisations separately to primary care and other healthcare clinicians. This may contribute to clinicians' lack of awareness of self-management programs and mean that individuals are not referred to the appropriate service. Modifying the system model would see joint ownership and delivery of self-management programs to encourage greater uptake by people living with chronic conditions.

The follow-up article²⁶⁰ to the review above reinforced the need for a broader systemic approach to reinforce self-management programs into clinical practice. Enablers of such engagement include:

- greater collaboration between primary care, government and condition-specific organisations to provide and coordinate self-management education programs
- education of primary care workers on the evidence and effectiveness of self-management programs
- identification of patients who may benefit from self-management support, such as those with low health literacy or minimal support networks
- greater deployment and use of practice nurses within general practice to provide patients with self-management support

²⁵⁷ Kidney Health Australia, Chronic disease prevention and management in primary care, <https://kidney.org.au/advocacy/policy/prevention-and-early-detection>

²⁵⁸ Ibid (ACSQHC).

²⁵⁹ N Glasgow et al., Chronic disease self-management support: The way forward for Australia, <https://www.mja.com.au/journal/2008/189/10/chronic-disease-self-management-support-way-forward-australia>

²⁶⁰ M F Harris et al., Chronic disease self-management: Implementation with and within Australian general practice, <https://www.mja.com.au/journal/2008/189/10/chronic-disease-self-management-implementation-and-within-australian-general>

- routinely including self-management support as part of patient care plans
- greater use of allied health professionals in self-management programs
- improving referral pathways between general practice and other support services.

Care for people with chronic conditions

The Menzies School of Health Research²⁶¹ undertook a systematic review of effective chronic kidney disease programs to better understand how positive clinical outcomes in the Indigenous population can be obtained. The review found that effective clinical care is predominately influenced by systemic factors (such as how integrated services are, who is leading the care, and how culturally appropriate the service is). Programs are likely to be effective if they include:

- handing over control of the program management to the primary health service
- promoting adherence to evidence-based protocols
- nurse-led care in a coordinated care program
- culturally appropriate patient education
- intensive patient follow-up.

Workforce planning and development

Another Menzies School of Health Research report details evidence-based workforce-related strategies and actions to improve chronic illness care for Aboriginal and Torres Strait Islander people.²⁶² These include:

- improving induction, training and mentoring programs for chronic illness clinicians
- developing associated resources and guidelines to increase skills in all areas of chronic illness
- modifying roles and career pathways of Aboriginal and Torres Strait Islander health workers towards provision of comprehensive care for patients and communities
- introducing workforce measures as key performance indicators, bringing a focus on strategies and actions to improve the stability of a qualified workforce.

Information, communication and disease management systems

The Menzies School of Health Research²⁶³ has developed a mobile health lab that aims to reduce chronic disease burden through increasing the accessibility of services. The mobile HealthLAB uses the latest health technology to measure participants' health and provide precision advice on their individual risk factors. It is an interdisciplinary initiative that utilises digital innovations to provide care to those who may not otherwise be able to access it.

The Australian Health Policy Collaboration²⁶⁴ released a report on how rapid information and data sharing can inform better clinical decisions. The report found that first and foremost, effective health services planning and management depends on comprehensive health information about the health of the population. As well, due to poor information and data sharing practices and structures, there is significant duplication and variability of data across the system. For example, there is significant duplication of health data between governments and service sectors, and a diversity of methods and data sets. There are also significant gaps.

²⁶¹ Menzies School of Health Research, Systematic review of effective chronic kidney disease programs, https://www.menzies.edu.au/page/Research/Projects/Kidney/Systematic_review_of_effective_chronic_kidney_disease_programs/

²⁶² Menzies School of Health Research, Chronic illness care for Aboriginal and Torres Strait Islander people: Final report, https://www.menzies.edu.au/icms_docs/214936_Final_Report_Chronic_Illness_Care_for_Aboriginal_and_Torres_Strait_Islander_people.pdf

²⁶³ Menzies School of Health Research, Mobile health lab aims to reduce chronic disease during National Science Week, https://www.menzies.edu.au/icms_docs/272410_Mobile_health_lab_aims_to_reduce_chronic_disease_during_National_Science_Week.pdf

²⁶⁴ Australian Health Policy Collaboration, Better data for better decisions, <http://www.mitchellinstitute.org.au/wp-content/uploads/2019/04/better-data-for-better-decisions.pdf>

Continuous quality improvement (CQI)

The Australian Commission on Safety and Quality in Health Care²⁶⁵ is leading reforms in CQI activities across the health systems, led by the belief that healthcare is enhanced through understanding outcomes from a patient's perspective. Insights into patient experiences can complement information from clinical measures, and as such, there is a move towards monitoring CQI through the use of patient-reported outcome measures (PROMs). PROMs can inform CQI activities through:

- generic PROMs – that are common to most people
- condition-specific PROMs – related to specific health conditions and their prevention and management
- population-specific PROMs – related to specific service sectors or segments of the population, for example Aboriginal and Torres Strait Islander people or children.

The ABCD National Research Partnership²⁶⁶ has undertaken nationwide research since 2010 to improve the quality of primary health care available to Indigenous people. Research has resulted in a set of evidence-based tools and processes for primary health care centres to monitor and evaluate services, resulting in improved chronic disease detection, management and quality of care. Training and support is provided by the Partnership to carry out CQI activities such as clinical audits, systems assessment, web-based data analysis and reporting.

²⁶⁵ ACSQHC, About PROMs, <https://www.safetyandquality.gov.au/our-work/indicators-measurement-and-reporting/patient-reported-outcomes/about-proms>

²⁶⁶ Menzies School of Health Research, ABCD National Research Partnership, https://www.menzies.edu.au/page/Research/Centres_initiatives_and_projects/ABCD_National_Research_Partnership_Project/

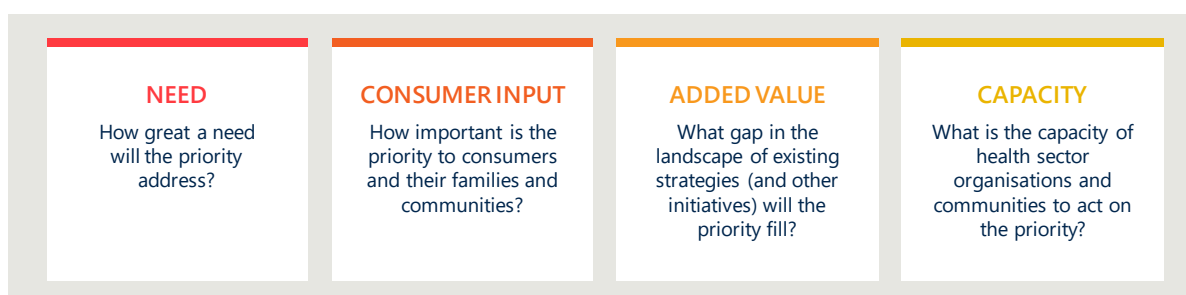
8 High-level framework for the next strategy

As part of the evaluation process, criteria were developed to guide the selection of priorities for the next strategy. Based on these criteria, and the evaluation findings and recommendations, an initial set of priorities have been identified. A workshop was held to test the criteria and priorities, along with other questions and hypotheses, with NT health sector stakeholders, including from the Department, TEHS, CAHS, NT PHN, Menzies School of Health Research and AMSANT. This informed the development of a high-level framework for the next strategy, including criteria; principles, priorities, activities and enablers; and outputs and outcomes. These are presented below. The high-level framework proposed in this section will provide a starting point for the collaborative development of the next strategy, alongside other inputs (for example, frameworks such as the Northern Territory Aboriginal Health Forum’s “core functions of primary health care”).²⁶⁷

8.1 Criteria to guide prioritisation

The proposed criteria to guide prioritisation, incorporating feedback from the workshop, are shown in Figure 47.

Figure 47 | Criteria to guide prioritisation



Need would be assessed (using a transparent and reproducible methodology) in terms of the action’s impact on individuals living with chronic conditions and their families and communities.

Consumer input would be sought through existing mechanisms such as Aboriginal health boards.

Added value would be assessed in terms of the benefit the priority would create in addition to that created by existing strategies.

Capacity would be assessed in terms of the extent to which health sector organisations and the communities they serve can achieve progress.

Assessment of all of these criteria would require high-quality data and information.

8.2 Proposed framework

The proposed framework (shown in Figure 48) seeks to:

- **Highlight leadership, governance and engagement** – Consistent with the recommendations and feedback from the workshop, the framework highlights the importance of shared leadership with Aboriginal organisations, inclusive governance involving organisations across the NT health sector, and ongoing engagement with consumers and their communities as well as with non-health sectors.

²⁶⁷ Northern Territory Aboriginal Health Forum, Core functions of primary health care: a framework for the NT, 2011, http://www.amsant.org.au/wp-content/uploads/2014/10/111001-NTAHF-ET-External-Core_PHC_Functions_Framework_FINAL.pdf

- **Distinguish priorities and enablers** – The framework distinguishes the priorities for the next strategy (for example, enabling healthier living conditions and behaviours) from the enablers through which they will be achieved (for example, workforce).
- **Focus on what needs to improve** – The framework focuses on what aspects of chronic conditions prevention and management most need to improve rather than providing a comprehensive framework spanning every aspect.
- **Use simple language** – Workshop participants suggested terms such as ‘social determinants’ and ‘risk factors’ were jargon which people use, not necessarily with the same meaning, rather than stating more clearly what they mean. It was also suggested that more active language would promote a greater sense of control. Accordingly, the framework uses strengths-based, plain English language.
- **Recognise the relationships between issues** – For example, workforce participants noted that social determinants are drivers of risk factors, and that addressing social determinants could be viewed as a means of addressing risk factors. In addition, workshop participants noted that all of the potential priorities discussed had a workforce element (i.e. a workforce-related improvement that would contribute to achievement of the priority).

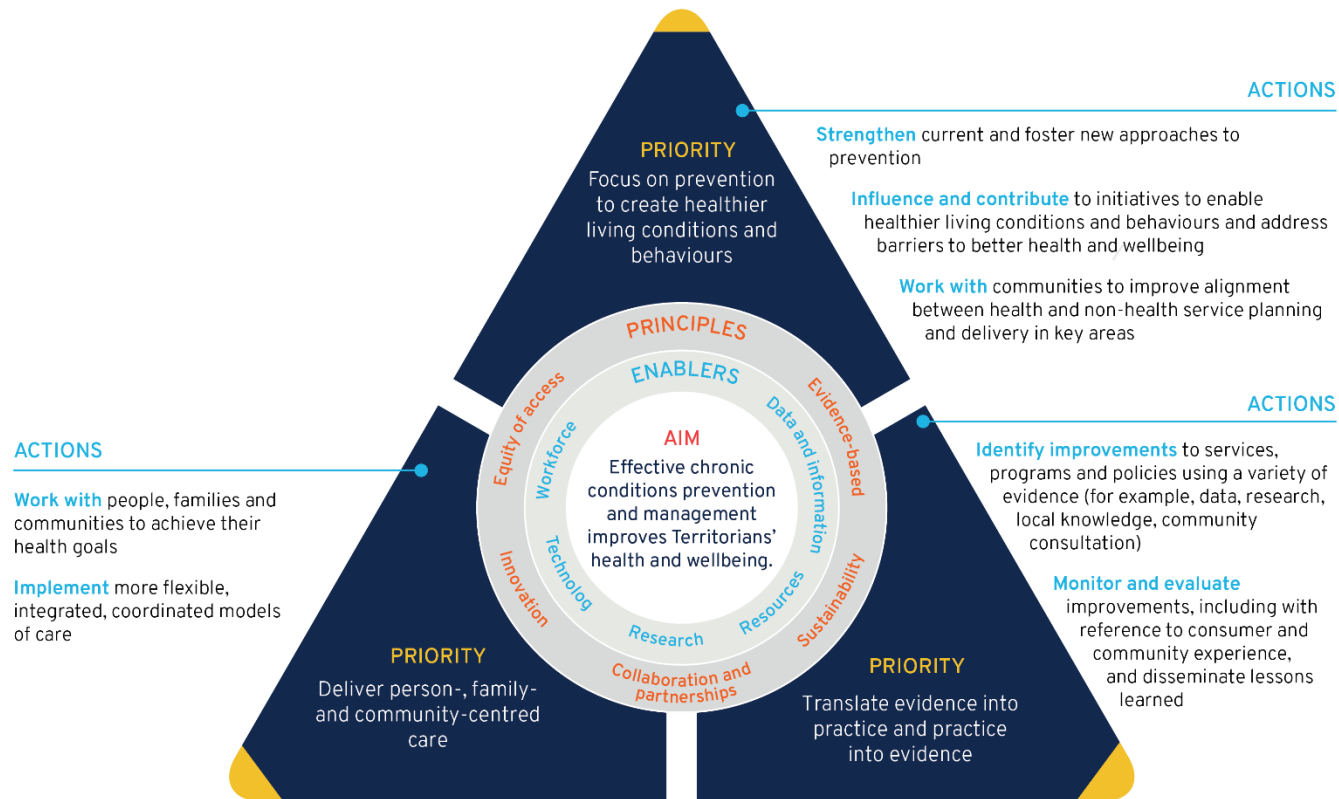
This reflects the recommendations and feedback from workshop participants.

Further information about the principles in Figure 48 is included in Table 41.

Table 41 | Description of principles

Principle	Description
Equity of access	All Territorians have equal access to high-quality chronic conditions prevention and management.
Collaboration and partnerships	Health sector stakeholders collaborate and partner with each other, with consumers and communities, and with organisations in other sectors to deliver chronic conditions prevention and management.
Evidence-based	Policy development and service delivery in relation to chronic conditions are informed by the best available evidence, including data, research and consumer and community input. The evidence base strengthens over time through monitoring, evaluation and sharing of findings.
Innovation	Innovation in policy and service delivery improves the effectiveness and efficiency of chronic conditions prevention and management.
Sustainability	Effective policy, service planning and delivery ensure the long-term sustainability of chronic conditions prevention and management while reducing the economic costs of chronic conditions.

Figure 48 | Overview of proposed framework



The priorities and activities were selected based on the criteria in Section 8.1 (excluding consumer input). Table 42 provides a more detailed rationale for the priorities and activities with reference to the criteria.

Table 42 | Description and rationale for each sub-priority

Priority	Activity	Rationale
Focus on prevention to create healthier living conditions and behaviours	Strengthen current and foster new approaches to prevention	<ul style="list-style-type: none"> Stakeholders consistently highlighted the ongoing challenges presented by social determinants, and this was supported by other data and literature (see Section 6.2). Health sector organisations bring knowledge and authority arising from their roles in addressing the consequences of social determinants. No existing strategy addresses the integration of health policies and services with those of other sectors in relation to chronic conditions (see Section 7.1). Recent research and current practice highlights the importance of the health sector taking action on social determinants at multiple levels, including the patient level (for example, referring patients to non-health services); the practice level (for example, creating outreach programs); the community level (for example, engaging local leaders in public health initiatives); and the system level (for example, regulatory and legislative changes) (see Section 7.4). As recognised in the current strategy, much of the burden of disease associated with chronic conditions is caused by common risk factors (see Section 3.2). Efforts to reduce smoking appear to have been less successful among Aboriginal people in remote communities (see Section 6.2). Health sector stakeholders are well positioned to address risk factors (for example, through brief interventions and evidence-based programs). Addressing common risk factors collectively through a chronic conditions strategy would be more effective than doing so through strategies for particular conditions. Workshop participants highlighted that social determinants are drivers of risk factors, and that addressing social determinants could be viewed as a means of addressing risk factors. This is consistent with current practice in other jurisdictions, which suggests that strategies that address primary prevention and improving social determinants are most effective when they are viewed in combination (see Section 7.3).
	Influence and contribute to initiatives to enable healthier living conditions and behaviours and address barriers to better health and wellbeing	
	Increase alignment between health and non-health service planning and delivery in key areas	
Deliver person-, family- and community-centred care	Work with people, families and communities to achieve their health goals	<ul style="list-style-type: none"> While there has been progress in relation to self-management, a Territory-wide approach has not been achieved. Stakeholders held mixed views about the extent to which self-management is embedded in day-to-day care. There is also evidence that understanding of the concept of self-management varies (see Section 6.5). Recent research highlights that self-management and self-management support remain key aspects of optimal chronic disease care (see Section 7.4).²⁶⁸ Workshop participants suggested it is time to move away from the term self-management and instead focus on concepts such as patient-centred care (of which self-management is one aspect) and health coaching.

²⁶⁸ N Glasgow et al., Chronic disease self-management support: The way forward for Australia, <https://www.mja.com.au/journal/2008/189/10/chronic-disease-self-management-support-way-forward-australia>

Implement more flexible, integrated, coordinated models of care

- The centrality of service integration and coordination to effective management of chronic conditions justifies its emphasis in a chronic conditions strategy (see Section 7.4).
- Stakeholders consistently suggested that integration and coordination of health service remains challenging. Stakeholders also expressed frustrations about information sharing (while recognising it has improved due to initiatives such as My eHealth Record) (see Sections 6.6 and 6.8).
- The NT Health Strategic Plan 2018-2022 includes an objective to “build innovative models of care for the delivery of integrated and coordinated health services working with ACCHOs and other external health service providers.” The next strategy could add value by engaging stakeholders in how to achieve this in relation to chronic conditions.

Translate evidence into practice and practice into evidence

Identify improvements to services, programs and policies using a variety of evidence (for example, data, research, local knowledge, community consultation)

- The evaluation highlighted evidence-practice gaps; for example, in relation to self-management and service integration and coordination (see Sections 6.5 and 6.6).
- This issue was discussed in the context of individual key action areas in the report (for example, key action areas 4 and 5), but it should also be considered as a meta-issue that could be addressed (namely, the consistent translation of evidence into practice).
- CQI is an important part of translating evidence into practice. Stakeholders identified that CQI is embedded in core service delivery across the NT, with established activities and processes implemented by health care providers. These efforts should be continued (see Section 6.9).

Monitor and evaluate improvements (including with reference to consumer and community experience) and disseminate lessons learned

- Workshop participants highlighted the importance of translating practice into evidence – by supporting health professionals to try new approaches, test whether they worked, and disseminate the findings.
- More generally, monitoring of chronic conditions prevention and management could help to ensure stakeholders across the system are informed of progress and areas for improvement.
- A potential need for this was evident in issues about which stakeholders held highly positive or negative views and were less aware of (or focused on) conflicting evidence (for example, confidence in early detection vs. mixed cancer screening rates, frustration about information sharing vs. evidence of increasing uptake of My eHealth Record) (see Sections 6.4 and 6.8).
- Evaluation is part of best practice – a clear evaluation approach is essential to assess the extent to which change is being achieved and continue driving change.

8.3 Outcomes

Table 43 presents the outputs and outcomes against each priority and activity. These are defined as follows:

- The outputs focus on the levers through which the NT health sector can influence the priorities.
- The short-term outcomes focus on the effects of the outputs on policy, planning, service delivery and consumers.
- The medium-term outcomes focus on the benefits of the priorities overall to consumers.
- The long-term outcomes focus on the benefits of the strategy as a whole to consumers.

Table 43 | Outputs and outcomes for each sub-priority

Priority	Activity	Output	Short-term outcome	Medium-term outcome	Long-term outcome
Focus on prevention to create healthier living conditions and behaviours	Strengthen current and foster new approaches to prevention	<p>Workforce</p> <p>The health workforce, from leaders to front line health professionals, is skilled in communicating and collaborating with relevant stakeholders (including outside the health sector).</p> <p>Data and information</p> <p>Data collection, sharing and linkage support communication and collaboration between sectors.</p> <p>Research</p> <p>Monitoring, evaluation and research inform responses to cross-sectoral challenges.</p> <p>Resources</p> <p>Funding and resourcing is gathered from all available</p>	<p>Whole-of-government, intersectoral and non-health initiatives are informed by a health perspective and achieve the maximum health benefits.</p>	Territorians enjoy healthier environments and lifestyles.	<p>Reduced incidence and later onset of chronic conditions</p> <p>Slower progression of chronic conditions</p> <p>Better quality of life for people with chronic conditions</p> <p>Reduced disparity in health outcomes between Aboriginal and non-Aboriginal people</p>
	Influence and contribute to initiatives to enable healthier living conditions and behaviours and address barriers to better health and wellbeing	<p>Health service planning and delivery reflects the circumstances of people, families and communities.</p> <p>Local environments are conducive to healthier living conditions and behaviours.</p>			

sources (including the Commonwealth).
Co-funding and resourcing processes maximise the collective impact of health and non-health investments in key areas.

Increase alignment between health and non-health service planning and delivery in key areas

Deliver person-, family- and community-centred care

Work with people, families and communities to achieve their health goals

Workforce

The health workforce is skilled in working with people who vary in their health literacy and supporting them to improve it.

The health workforce is skilled in engaging with consumers (including through culturally appropriate communication) to achieve sustained changes in health behaviour.

The health workforce is skilled in engaging people, families and communities in shared decision-making processes.

Technology

Technology enables greater choice and control for people, families and communities, including through telehealth.

Technology supports engagement and information sharing with people, families and communities.

People are supported to make healthier choices and change behaviours (including through increased health literacy).

People, families and communities exercise self-determination in relation to healthcare.

Territorians receive care that is better tailored to their contexts and preferences.

Data and information

People, families and communities have access to appropriate information about chronic conditions prevention and management (including via digital channels).

Research

Monitoring, evaluation and research inform solutions to specific community needs.

Resources

Investments are informed by consumer and community input.

Implement more flexible, integrated, coordinated models of care

Workforce

The health workforce is skilled in working in flexible, multidisciplinary teams.

The health workforce supports effective discharge and referral pathways.

“The health workforce is suitably trained, resourced and distributed to meet identified need.”²⁶⁹

Technology

Technology enables access to timely and appropriate services, including through telehealth.

People easily access and navigate the health system.
 Planning, multidisciplinary care and information sharing support continuity of care across services.
 Transitions between services and across health care settings are smooth.
 Services reflect local needs and preferences.

²⁶⁹ COAG Health Council, National Strategic Framework for Chronic Conditions, 2017, <https://www.health.gov.au/sites/default/files/documents/2019/09/national-strategic-framework-for-chronic-conditions.pdf>

Data and information

Data and information sharing supports communication and collaboration within and between health services and settings.

People, families and communities have access to appropriate information about how to navigate the health system.

Research

Monitoring, evaluation and research inform development of and improvement in models of care.

Resources

Funding and resourcing is gathered from all available sources (including the Commonwealth).

Co-planning, funding and resourcing processes maximise the collective impact of health investments.

Translate evidence into practice and practice into evidence

Identify improvements to services, programs and policies using a variety of evidence (for example, data, research, local knowledge, community consultation)

Monitor and evaluate improvements (including with reference to consumer and community experience)

Workforce

The health workforce is skilled in using data, research and other evidence to identify improvements in policy, planning and service delivery.

Technology / data and information

Technology supports the collection, analysis and

Appropriate data, research and other evidence are readily available and routinely inform improvements in policy, planning and service delivery.

Appropriate data, research and other evidence are used to monitor and evaluate

Appropriate data, research and other evidence are readily available and routinely inform improvements in policy, planning and service delivery.

and disseminate lessons learned

distribution of relevant data and information.

Research

Monitoring, evaluation and research are undertaken by the health workforce and external researchers and organisations.

Resources

Monitoring, evaluation and research informs investments of funding and resourcing and increases their cost-effectiveness and efficiency.

improvements in policy, planning and service delivery. Findings from monitoring and evaluation are disseminated across the NT health sector to inform further improvements.

Appendix A Evaluation questions

The lines of enquiry for the evaluation are shown in Table 44 below.

Table 44 | Lines of enquiry

KEY LINES OF ENQUIRY	SECONDARY LINES OF ENQUIRY	SUB-QUESTIONS
IMPLEMENTATION <i>How well has the Strategy been implemented?</i>	To what extent was the Strategy <i>implemented</i> as intended?	How was the Strategy intended to be implemented and by whom?
		To what extent was the Strategy understood by key stakeholders?
	What were the <i>barriers and enablers</i> to the Strategy being implemented as intended?	How was the Strategy implemented in practice (who, where, when and how)?
		What factors internal and external to the Department enabled the implementation of the Strategy?
IMPACT <i>What impact has the Strategy achieved?</i>	To what extent were the intended <i>outcomes and impact</i> of the strategy achieved?	What factors internal and external to the Department hindered the implementation of the Strategy?
		What specific outcomes and overall impact did the Strategy intend to achieve?
	To what extent can the outcomes and impacts achieved be <i>attributed</i> to the strategy?	To what extent, where and for whom have these outcomes and impact been achieved?
		Were any positive or negative unintended outcomes observed?
IMPROVEMENT <i>How can the Strategy be improved?</i>	What <i>context</i> does the next strategy need to respond to?	To what extent did the Strategy contribute to the outcomes and impact?
	What <i>strategies</i> should the next strategy include?	What factors outside of the Strategy may have contributed to the outcomes and impact?
		What key population, health, policy and resource trends will impact the objectives of a next strategy?
	What <i>outcomes</i> should the next strategy include?	What elements of the current Strategy should be sustained, expanded or improved for the next strategy?
What strategic efforts from comparable jurisdictions should be considered in the next strategy?		
		Which outcomes can most effectively align strategic inputs with the goal of the next strategy?

Appendix B Quantitative analysis

B.1 Statistical analysis method

Nous applied time series analysis to data on indicators of chronic conditions broken down by gender, Aboriginal status and/or health service where possible. The objective was to test for evidence of change.

For each indicator, the following question was asked: is there evidence of change from 2010 onwards? Nous fit two linear models to the data, both with time as the sole explanatory variable. The first was a non-zero slope line (indicating change with time, and the null hypothesis). The second was a constant flat line (indicating no change with time, and the alternative hypothesis). The two models in each were statistically compared with an F-test, which was used to accept or reject their null hypotheses (using the commonly accepted p-value of 0.05 as the threshold).

All modelling was done in R using generalised least squares fit with maximum likelihood, and where there were sufficient data (usually 3 or more data points) the fits were adjusted for autocorrelation in the residuals. When this wasn't reliable (due to the number of data points and/or their values), autocorrelation was ignored and the most conservative results were reported.

The limitations of the analysis were that:

- for most analyses, there were few observations (ten or fewer)
- in many cases the data was volatile, due the relatively small population group sizes.

As such, indicators may exhibit changes that are policy relevant but not statistically significant.

B.2 Condition-level trends

Mortality due to chronic conditions

Figure 49 | Age-adjusted mortality rate due to ischaemic heart disease, by Aboriginal status and gender, NT, 2010-2016

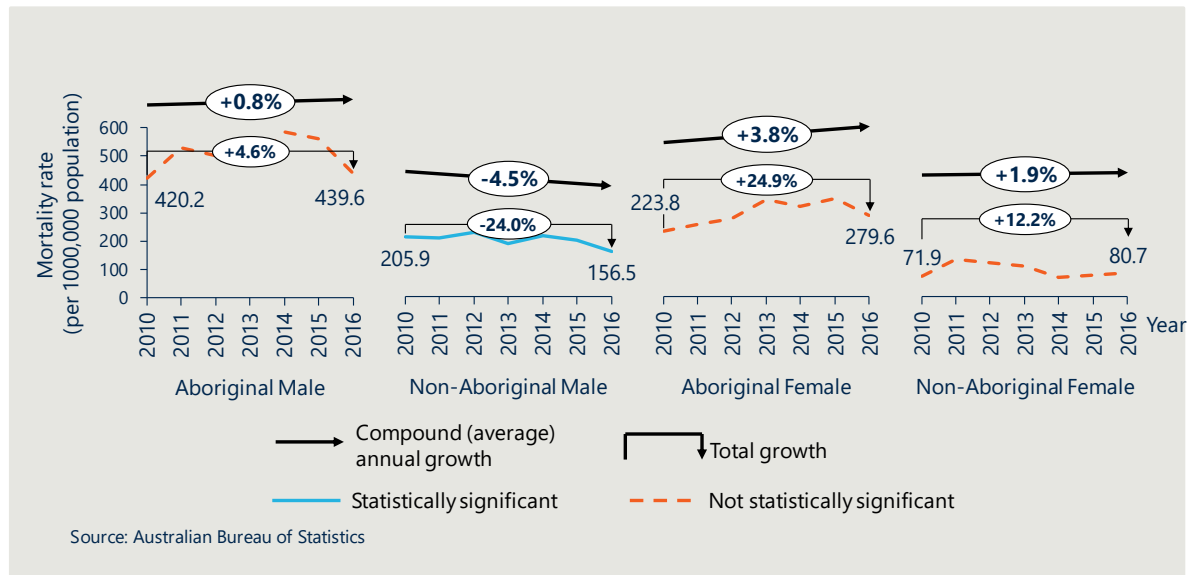


Figure 50 | Age-adjusted mortality rate due to stroke, by Aboriginal status and gender, NT, 2010-2016

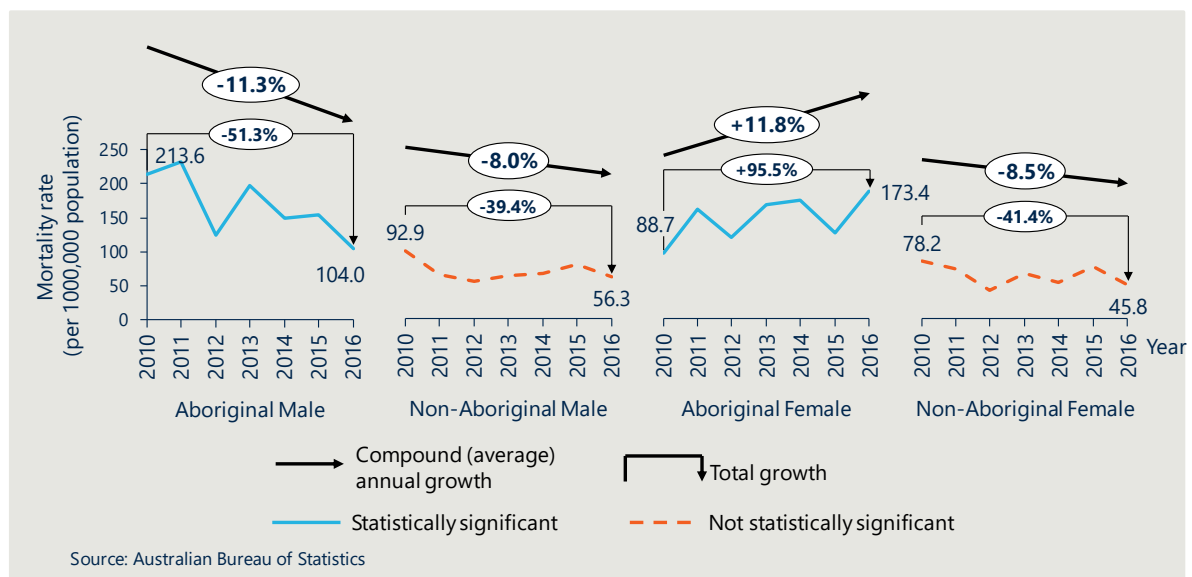


Figure 51 | Age-adjusted mortality rate due to hypertension, by Aboriginal status and gender, NT, 2010-2016

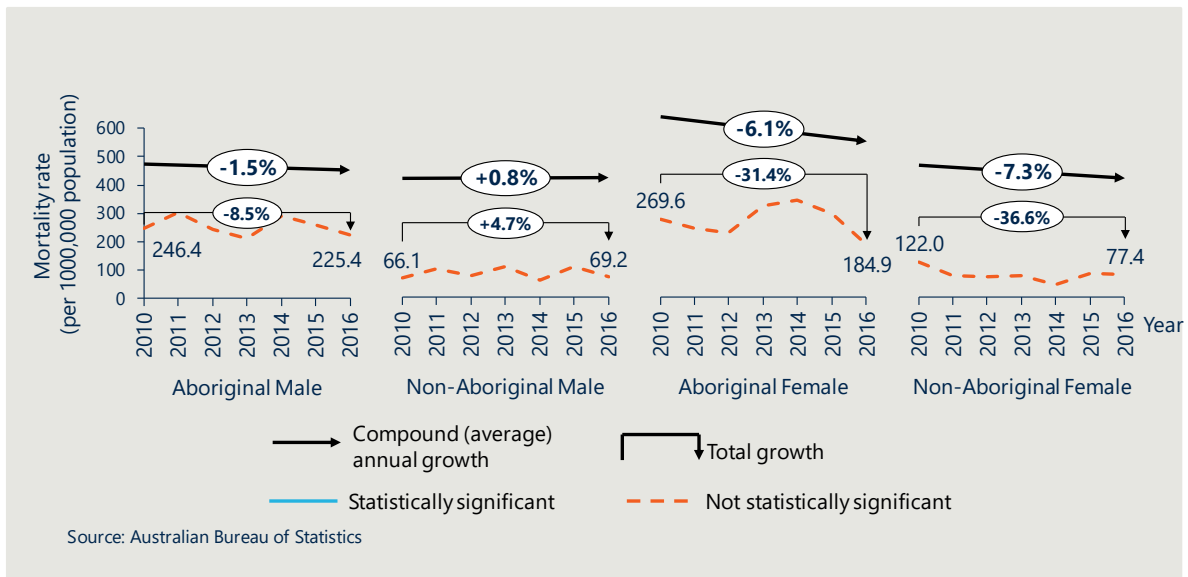


Figure 52 | Age-adjusted mortality rate due to chronic renal failure, by Aboriginal status and gender, NT, 2010-2016

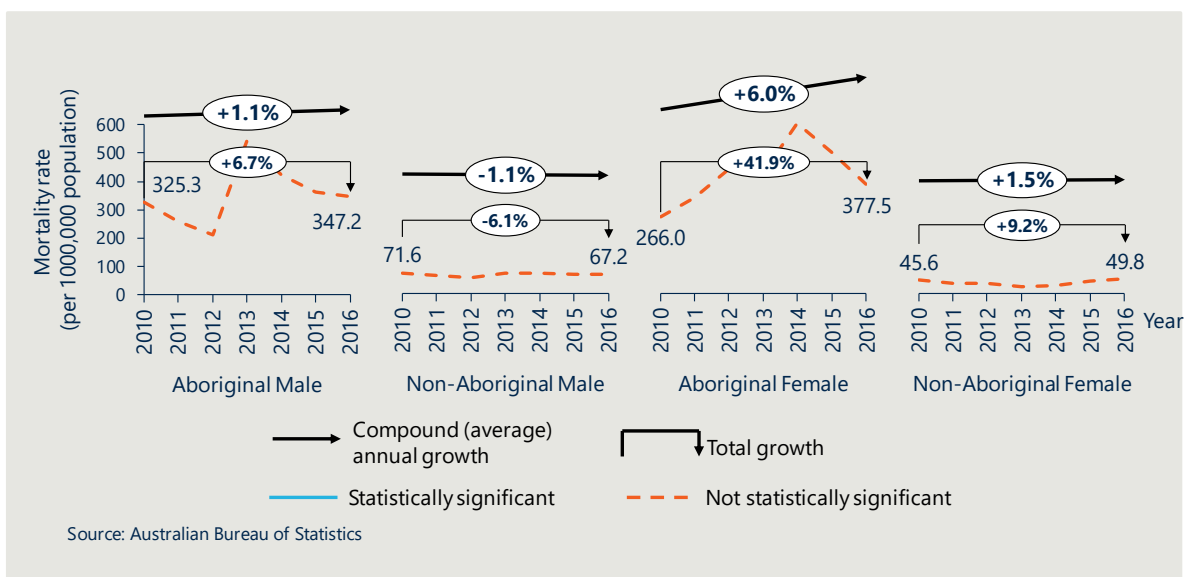


Figure 53 | Age-adjusted mortality rate due to chronic obstructive pulmonary disease, by Aboriginal status and gender, NT, 2010-2016

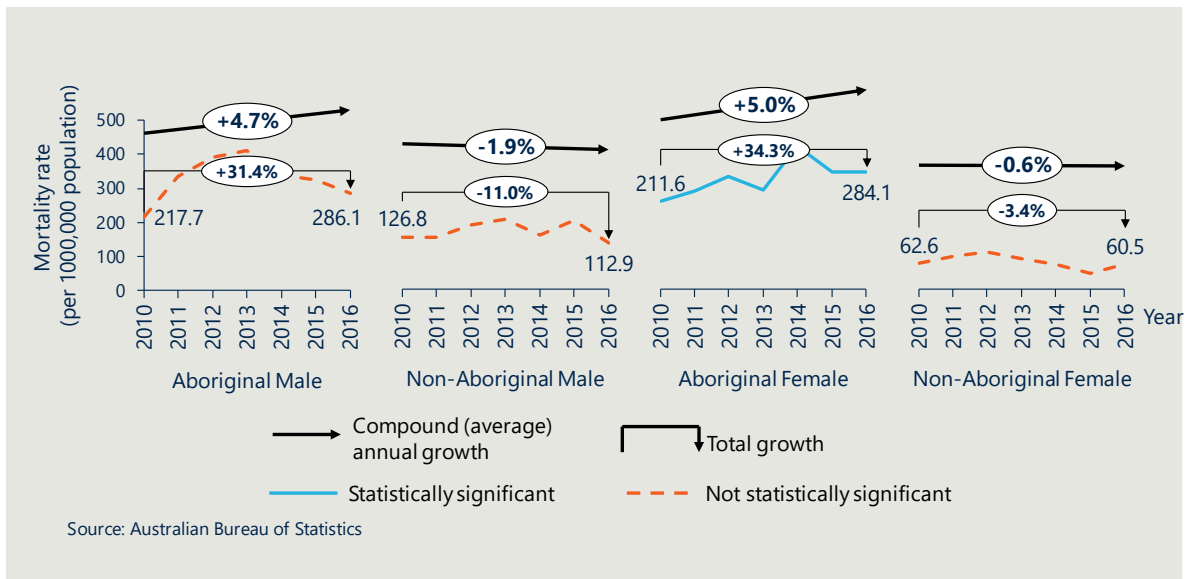


Figure 54 | Age-adjusted mortality rate due to rheumatic heart disease, by Aboriginal status and gender, NT, 2010-2016

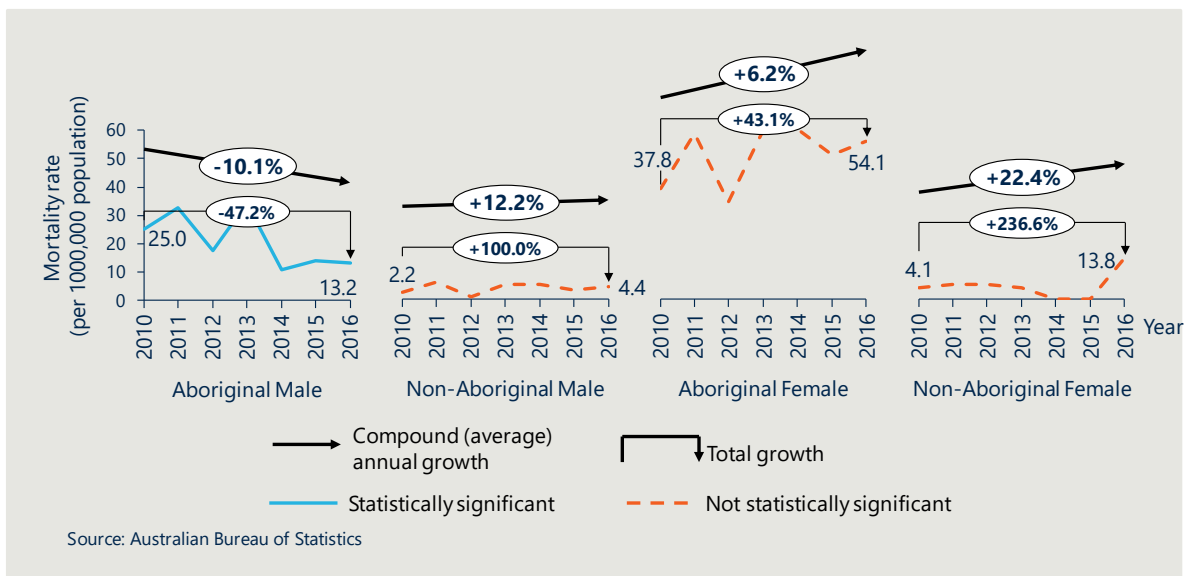


Figure 55 | Age-adjusted mortality rate due to selected cancers, by Aboriginal status and gender, NT, 2010-2016

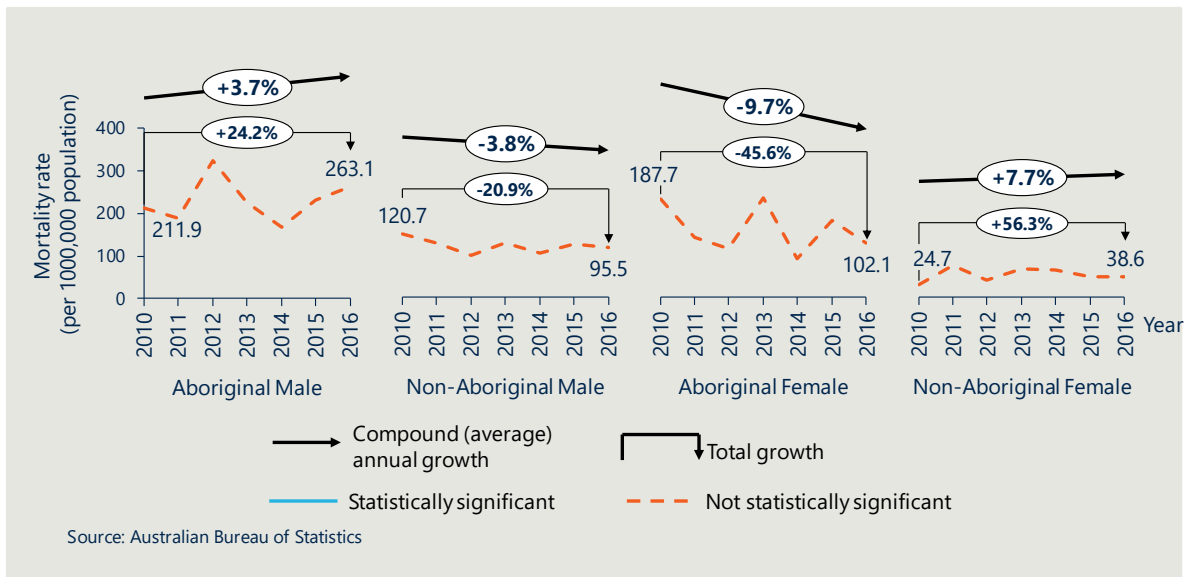


Figure 56 | Age-adjusted mortality rate due to anxiety and depression, by Aboriginal status and gender, NT, 2010-2016

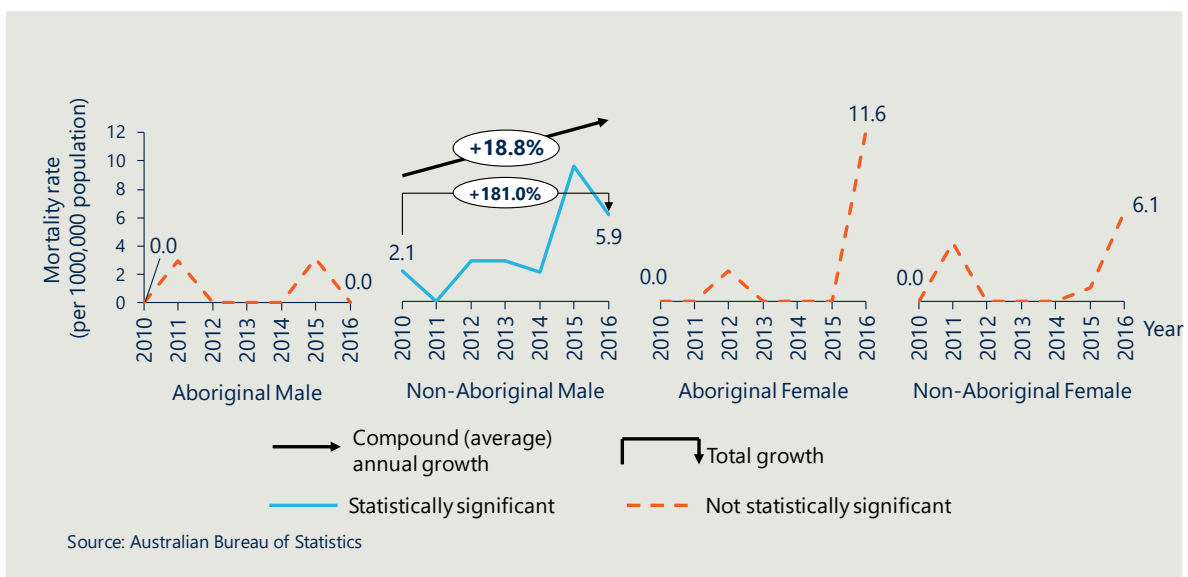
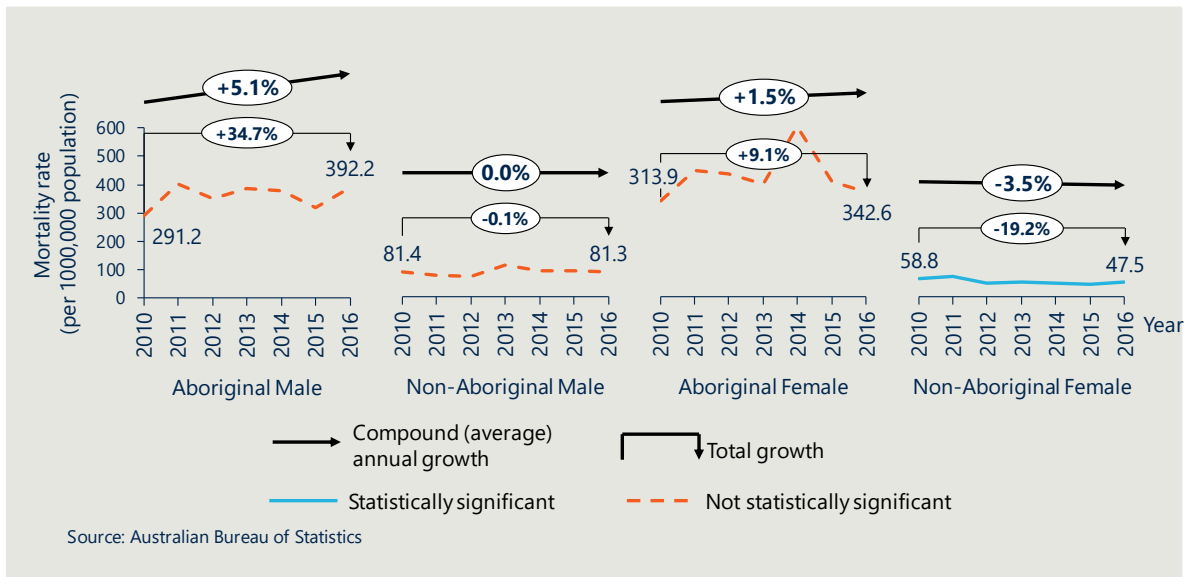


Figure 57 | Age-adjusted mortality rate due to diabetes, by Aboriginal status and gender, NT, 2010-2016



Morbidity due to chronic conditions

Figure 58 | Age-standardised rate of total years lived with disability due to infectious diseases, by Aboriginal status, NT, 1999-2003 (five-year periods)

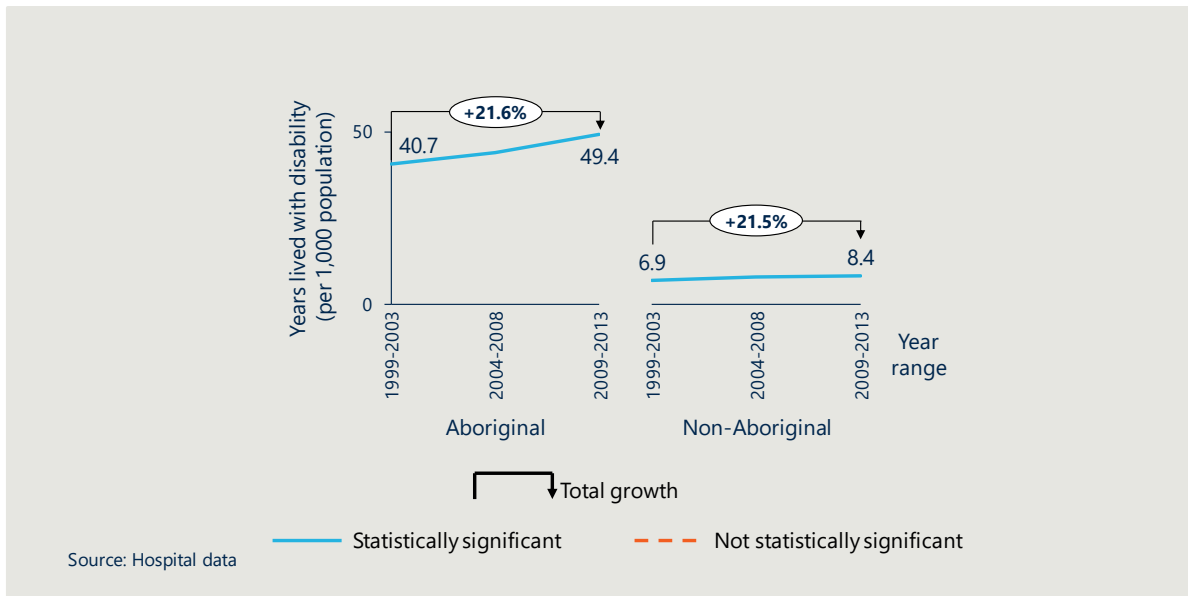


Figure 59 | Age-standardised rate of total years lived with disability due to unintentional injuries, by Aboriginal status, NT, 1999-2003 (five-year periods)

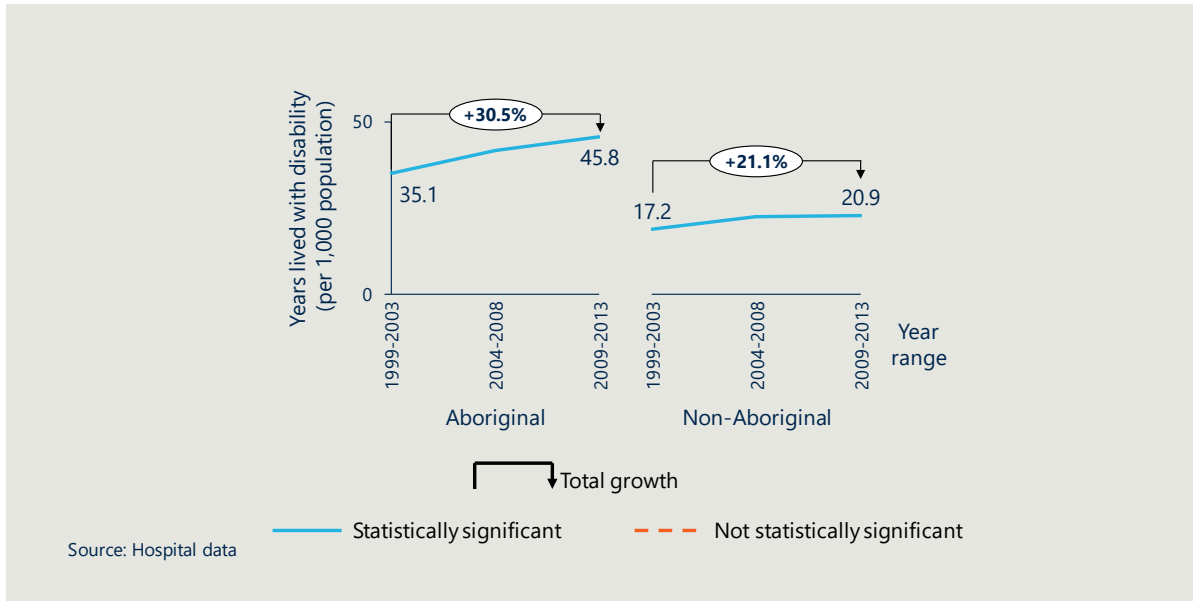


Figure 60 | Age-standardised rate of total years lived with disability due to mental and substance use disorders, for Aboriginal people, NT, 1999-2003 (five-year periods)

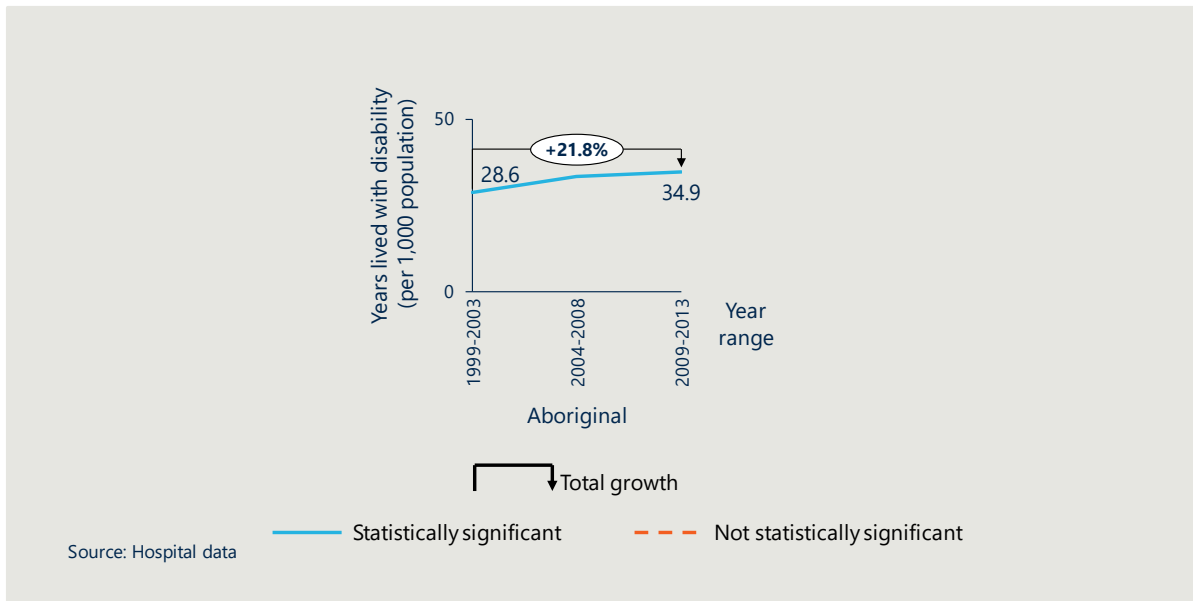


Figure 61 | Age-standardised rate of total years lived with disability due to respiratory diseases, for Aboriginal people, NT, 1999-2003 (five-year periods)

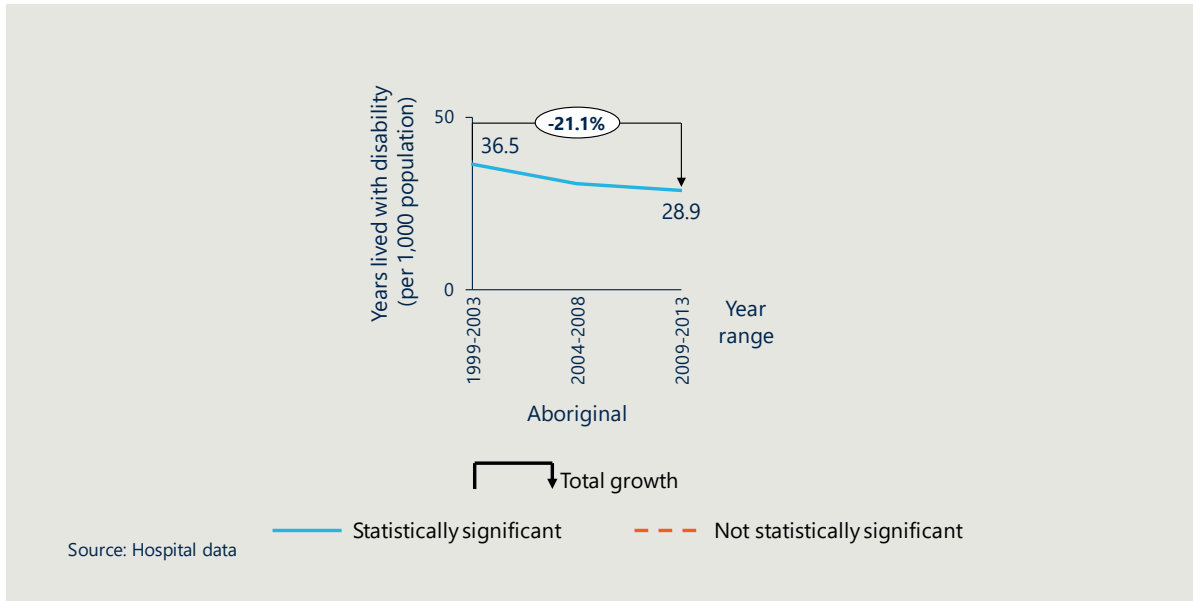


Figure 62 | Age-standardised rate of total years lived with disability due to gastrointestinal disease, for non-Aboriginal people, NT, 1999-2003 (five-year periods)

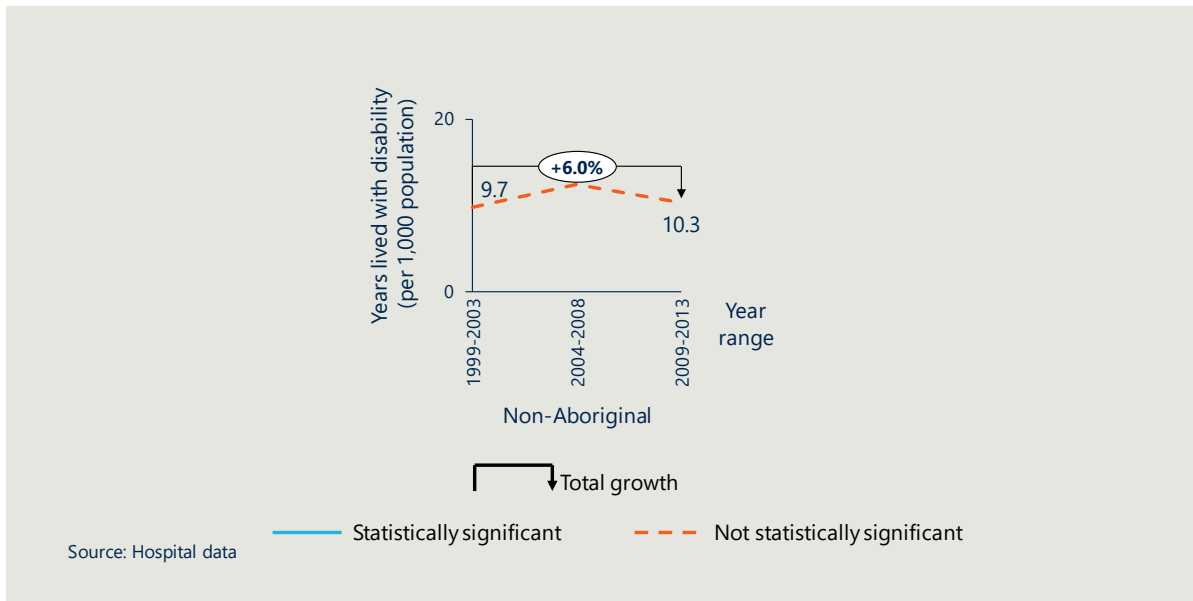
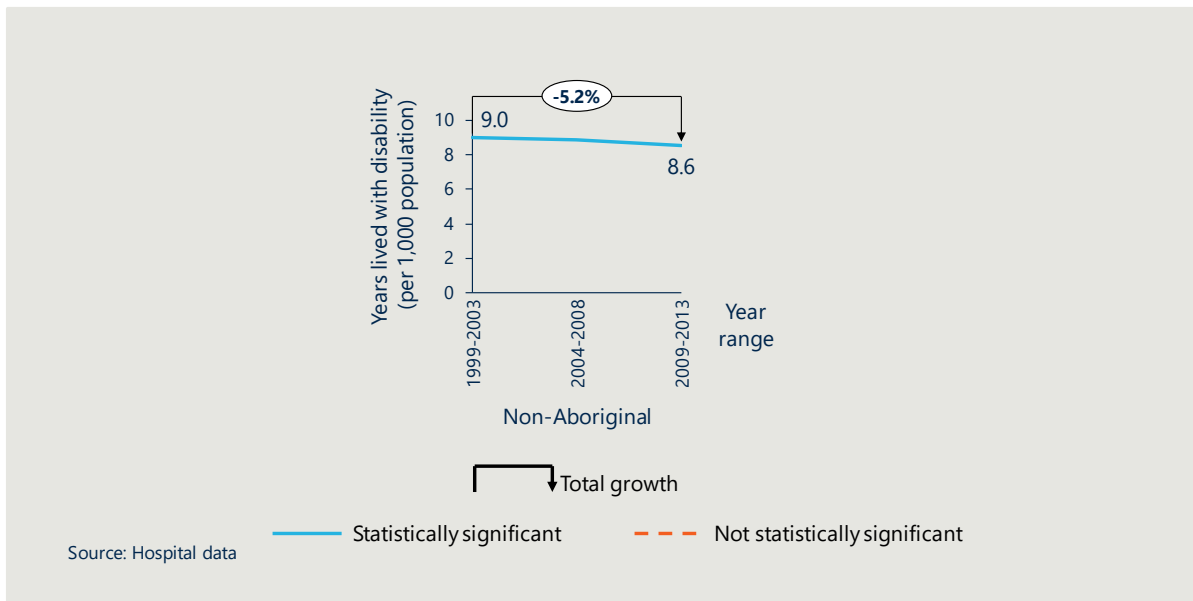


Figure 63 | Age-standardised rate of total years lived with disability due to reproductive and maternal conditions, for non-Aboriginal people, NT, 1999-2003 (five-year periods)



Hospitalisations due to chronic conditions

Figure 64 | Rate of hospitalisations due to ischaemic heart disease, by Aboriginal status and gender, NT, 2010-2018

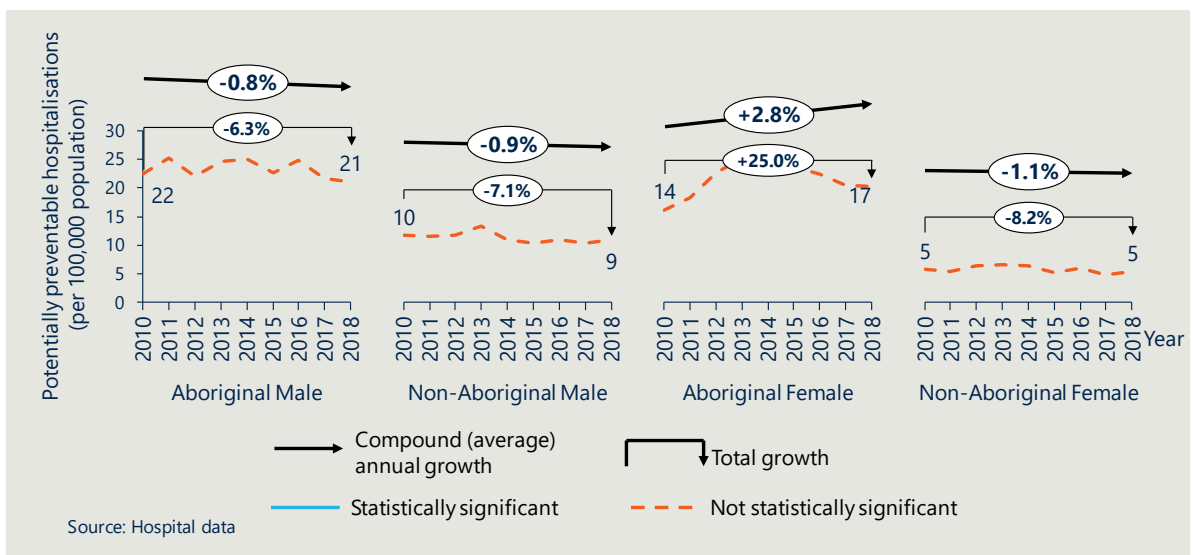


Figure 65 | Rate of hospitalisations due to hypertension, by Aboriginal status and gender, NT, 2010-2018

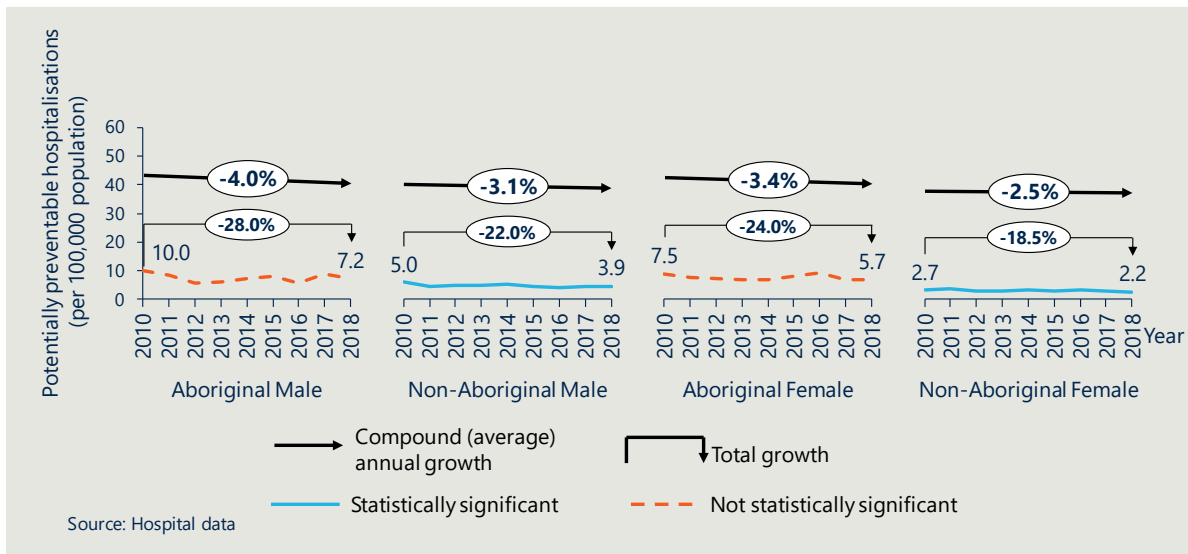


Figure 66 | Rate of hospitalisations due to renal failure, by Aboriginal status and gender, NT, 2010-2018

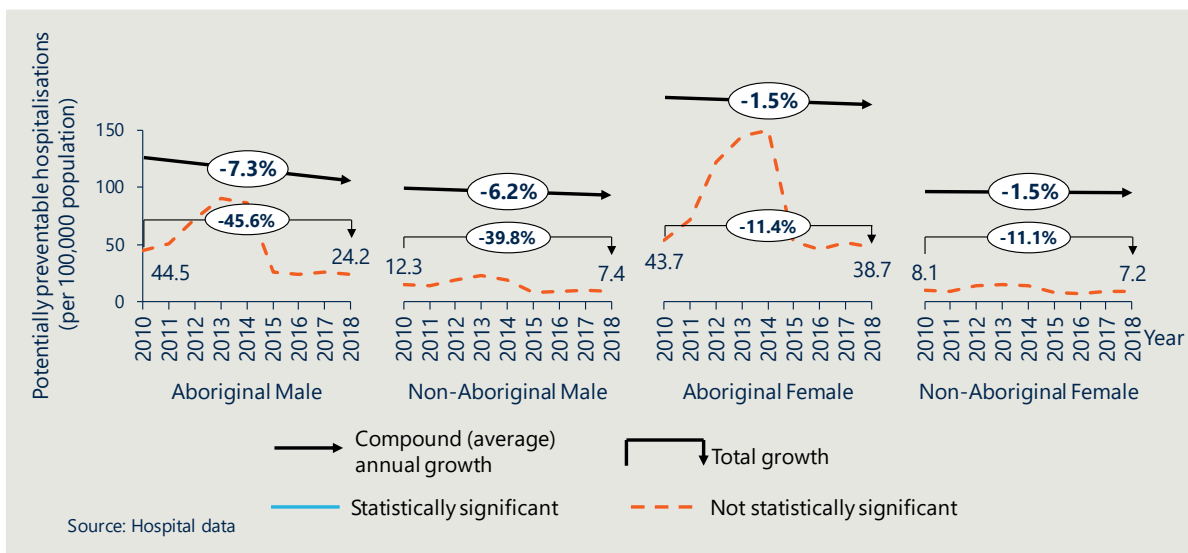


Figure 67 | Rate of hospitalisations due to chronic obstructive pulmonary disease, by Aboriginal status and gender, NT, 2010-2018

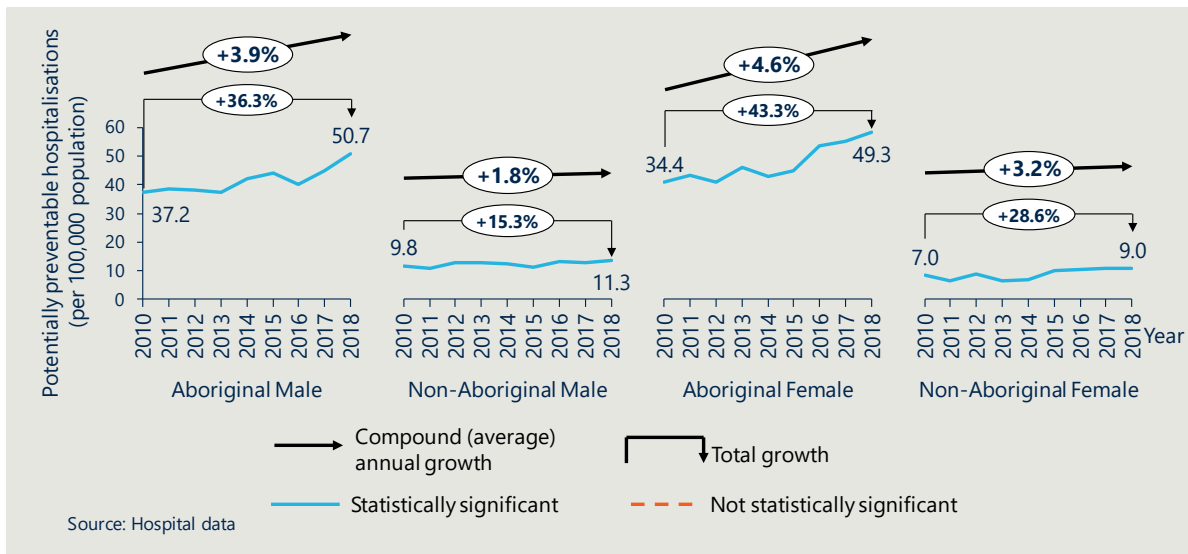


Figure 68 | Rate of hospitalisations due to chronic rheumatic heart disease, by Aboriginal status and gender, NT, 2010-2018

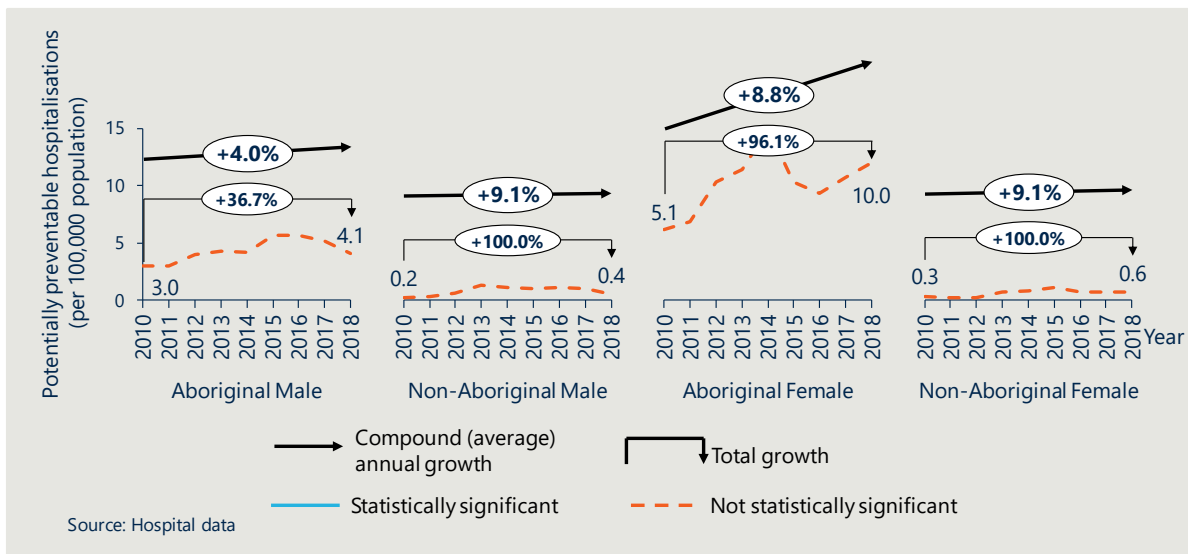


Figure 69 | Rate of hospitalisations due to selected cancers, by Aboriginal status and gender, NT, 2010-2018

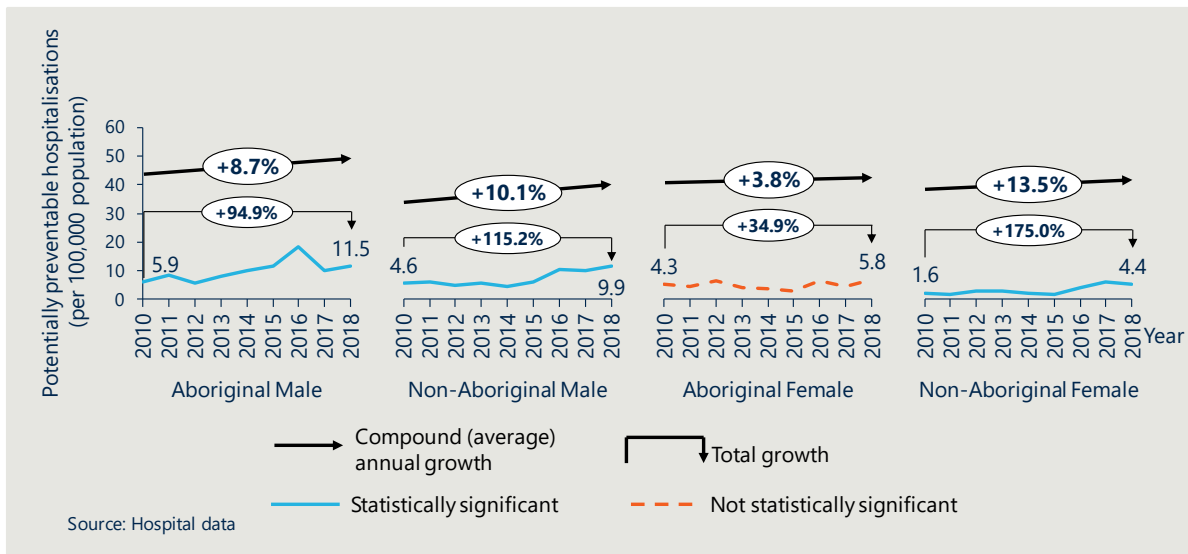


Figure 70 | Rate of hospitalisations due to diabetes, by Aboriginal status and gender, NT, 2010-2018

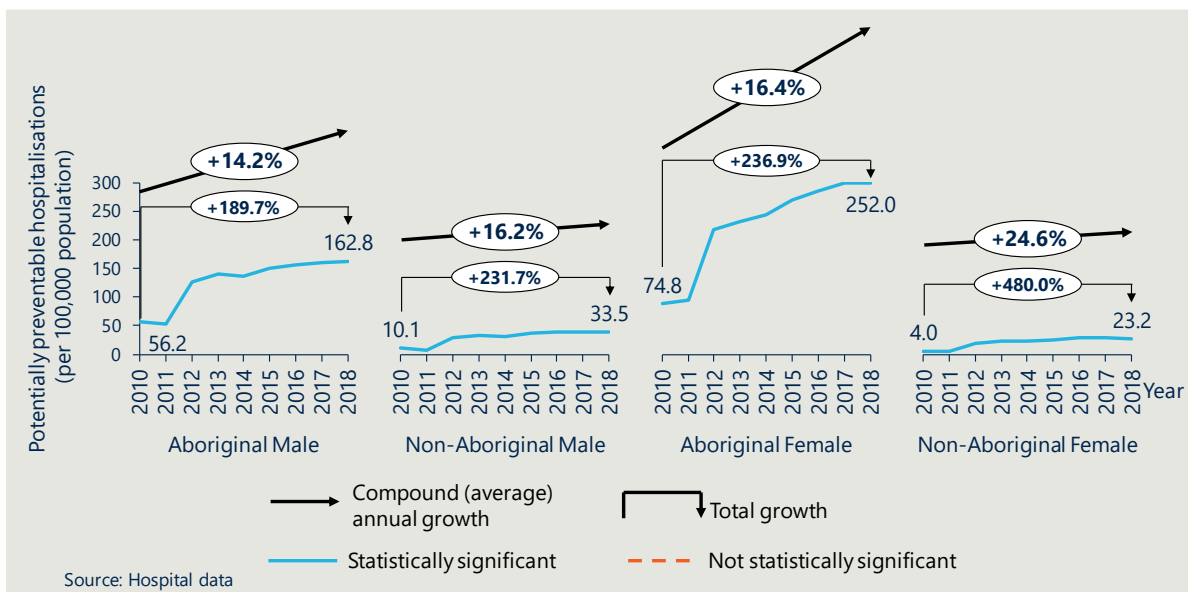
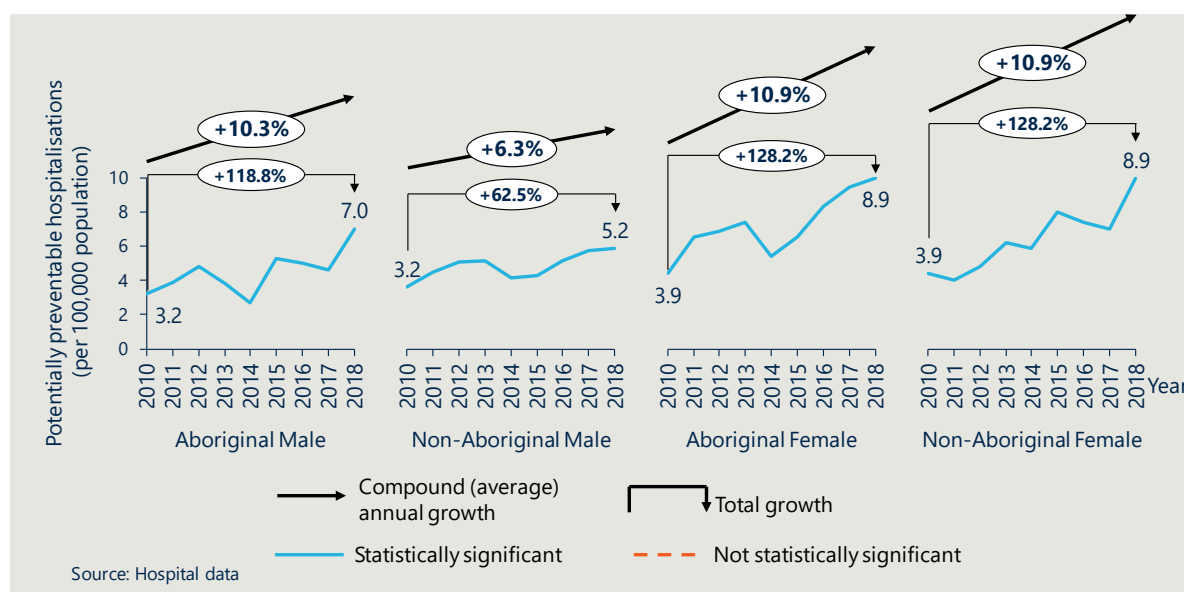


Figure 71 | Rate of hospitalisations due to depression and anxiety, by Aboriginal status and gender, NT, 2010-2018



B.3 Data

8.3.1 Overarching trends

8.3.1.1 Low birthweight

Table 45 | Percentage of babies with low birthweight, NT, by mother's Aboriginal status and health service, 2010-2017

Year	Top End Health Service		Central Australia Health Service	
	Aboriginal (%)	Non-Aboriginal (%)	Aboriginal (%)	Non-Aboriginal (%)
2010	16.0	6.8	11.9	3.8
2011	18.4	6.5	12.5	6.0
2012	15.2	5.6	11.8	5.4
2013	15.7	5.5	15.9	6.8
2014	16.5	6.6	10.8	5.5
2015	17.7	6.1	13.5	5.4
2016	19.3	6.1	11.5	7.0

2017	16.2	6.7	13.4	3.7
Total	16.9	6.2	12.6	5.4

Source: NT Midwives Collection

8.3.1.2 Life expectancy

Table 46 | Life expectancy, NT, by Aboriginal status and gender, 2010-2016

Year	Male		Female	
	Aboriginal (Years)	Non-Aboriginal (Years)	Aboriginal (Years)	Non-Aboriginal (Years)
2010	64.7	77.6	69.8	84.5
2011	63.8	78.6	68.7	83.8
2012	62.4	80.5	69.2	85.5
2013	63.9	79.0	67.0	83.3
2014	65.0	79.3	66.5	85.5
2015	66.71	80.17	68.24	89.73
2016	69.13	84.11	69.94	89.35

Source: Australian Coordinating Registry (ACR)

8.3.1.3 Mortality rate

Table 47 | Age-adjusted mortality rate due to all chronic conditions, NT, by Aboriginal status and gender, 2010-2016 (deaths per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	1199.5	476.8	899.7	267.4
2011	1214.5	437.5	922.3	332.1
2012	1348.3	416.7	986.6	281.1
2013	1265.1	498	1031.7	287
2014	1276.1	442.6	1202.1	226.8

2015	1224.3	486.3	1003.1	260.1
2016	1113.5	407.9	973.6	276.2
Source: Australian Bureau of Statistics				

Table 48 | Age-adjusted mortality rate due to ischaemic heart disease, NT, by Aboriginal status and gender, 2010-2016 (deaths per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	420.2	205.9	223.8	71.9
2011	530.8	201.8	249.7	128.1
2012	501.2	221.7	266.8	117.8
2013	464.2	184.3	334.7	105
2014	586.5	208	311	66.9
2015	561.4	194.2	339.5	74.5
2016	439.6	156.5	279.6	80.7
Source: Australian Bureau of Statistics				

Table 49 | Age-adjusted mortality rate due to stroke, NT, by Aboriginal status and gender, 2010-2016 (deaths per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	213.6	92.9	88.7	78.2
2011	232.2	60.4	149	67.1
2012	125.2	51.3	110.8	39.3
2013	198	57.8	155.4	61.1
2014	150	61.3	162.1	48.9
2015	153.7	73.9	117.1	71
2016	104	56.3	173.4	45.8

Source: Australian Bureau of Statistics

Table 50 | Age-adjusted mortality rate due to hypertension, NT, by Aboriginal status and gender, 2010-2016 (deaths per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	246.4	66.1	269.6	122.0
2011	301.5	99.2	237.2	73.7
2012	243.9	74.3	222	72.3
2013	213.6	106.1	314.8	73.9
2014	292.6	57.9	333.4	44.9
2015	257.7	106	287.5	81.9
2016	225.4	69.2	184.9	77.4

Source: Australian Bureau of Statistics

Table 51 | Age-adjusted mortality rate due to chronic renal disease, NT, by Aboriginal status and gender, 2010-2016 (deaths per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	325.3	71.6	266	45.6
2011	259.6	62.5	330.6	33.7
2012	212.5	56.6	426.4	36.6
2013	539.7	69	414	25.2
2014	420.6	69.4	587.2	26.3
2015	362.9	67.7	485.8	43.6
2016	347.2	67.2	377.5	49.8

Source: Australian Bureau of Statistics

Table 52 | Age-adjusted mortality rate due to chronic obstructive pulmonary disease (including asthma), NT, by Aboriginal status and gender, 2010-2016 (deaths per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	217.7	126.8	211.6	62.6
2011	336	126.5	238.4	80.6
2012	393	155.4	272.5	90.1
2013	411.9	169.5	240.8	72.9
2014	339.8	130.1	346.1	60.8
2015	325.9	166.8	284.7	37.3
2016	286.1	112.9	284.1	60.5

Source: Australian Bureau of Statistics

Table 53 | Age-adjusted mortality rate due to chronic rheumatic heart disease, NT, by Aboriginal status and gender, 2010-2016 (deaths per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	25.0	2.2	37.8	4.1
2011	32.5	5.8	56.8	5.1
2012	17.4	0.9	33.2	5
2013	34.2	5.1	57.9	3.8
2014	10.8	4.9	58.3	0
2015	13.9	3	49.5	0
2016	13.2	4.4	54.1	13.8

Source: Australian Bureau of Statistics

Table 54 | Age-adjusted mortality rate due to alcohol and smoking related cancer, NT, by Aboriginal status and gender, 2010-2016 (deaths per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	211.9	120.7	187.7	24.7
2011	189.4	103.6	113.1	59.3
2012	324.1	78.8	92.8	33.4
2013	225.1	103.7	188.9	52.9
2014	167.6	83.1	74	51.8
2015	230.4	100.3	145.7	38.4
2016	263.1	95.5	102.1	38.6

Source: Australian Bureau of Statistics

Table 55 | Age-adjusted mortality rate due to anxiety and depression, NT, by Aboriginal status and gender, 2010-2016 (deaths per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	0	2.1	0	0
2011	3	0	0	4
2012	0	2.8	2.1	0
2013	0	2.8	0	0
2014	0	2	0	0
2015	3.1	9.2	0	0.9
2016	0	5.9	11.6	6.1

Source: Australian Bureau of Statistics

Table 56 | Age-adjusted mortality rate due to diabetes, NT, by Aboriginal status and gender, 2010-2016 (deaths per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	291.2	81.4	313.9	58.8
2011	401.7	69.2	412.2	66.9
2012	349.4	68.4	400.3	45.7
2013	385.9	102.1	368.7	49.2
2014	379.2	84.7	555.6	43.6
2015	317.9	85	376.2	41.8
2016	392.2	81.3	342.6	47.5

Source: Australian Bureau of Statistics

8.3.1.4 Morbidity, Years Lived with Disability

Table 57 | Age-standardised rate of total years lived with a disability due to chronic conditions, NT, by Aboriginal status and health service, 1999-2013 (per 1,000 population)

Year	Aboriginal		Non-Aboriginal	
	Central Region	Top End Region	Central Region	Top End Region
1999-2003	447.5	328.8	110.1	88.5
2004-2008	485.4	339.2	116.8	112.4
2009-2013	522.1	297.0	137.3	95.3

Source: Hospital data

Table 58 | Age-standardised rate of total years lived with disability due to infectious disease, by Aboriginal status, NT, 1999-2003 (five-year periods)

Year	Aboriginal	Non-Aboriginal
1999-2003	40.7	6.9
2004-2008	44.2	7.7
2009-2013	49.4	8.4

Source: Hospital data

Table 59 | Age-standardised rate of total years lived with disability due to unintentional injuries, by Aboriginal status, NT, 1999-2003 (five-year periods)

Year	Aboriginal	Non-Aboriginal
1999-2003	35.1	17.2
2004-2008	41.6	20.7
2009-2013	45.8	20.9

Source: Hospital data

Table 60 | Age-standardised rate of total years lived with disability due to cardiovascular disease, by Aboriginal status, NT, 1999-2003 (five-year periods)

Year	Aboriginal	Non-Aboriginal
1999-2003	45.4	10.6
2004-2008	51.3	14.8
2009-2013	41.2	10.0

Source: Hospital data

Table 61 | Age-standardised rate of total years lived with disability due to mental and substance abuse disorders, for Aboriginal people, NT, 1999-2003 (five-year periods)

Year	Aboriginal
1999-2003	28.6
2004-2008	33.5
2009-2013	34.9

Source: Hospital data

Table 62 | Age-standardised rate of total years lived with disability due to respiratory diseases, for Aboriginal people, NT, 1999-2003 (five-year periods)

Year	Aboriginal
1999-2003	36.5

2004-2008	30.7
2009-2013	28.9
Source: Hospital data	

Table 63 | Age-standardised rate of total years lived with disability due to gastrointestinal disease, for non-Aboriginal people, NT, 1999-2003 (five-year periods)

Year	Non-Aboriginal
1999-2003	9.7
2004-2008	12.4
2009-2013	10.3
Source: Hospital data	

Table 64 | Age-standardised rate of total years lived with disability due to reproductive and maternal conditions, for non-Aboriginal people, NT, 1999-2003 (five-year periods)

Year	Non-Aboriginal
1999-2003	9.0
2004-2008	8.9
2009-2013	8.6
Source: Hospital data	

8.3.1.5 Potentially preventable hospitalisations

Table 65 | Rate of potentially preventable hospitalisations due to all chronic conditions, NT, by Aboriginal status and health service, 2010-2018 (per 100,000 population)

Financial year	Aboriginal		Non-Aboriginal	
	Top End Region	Central Region	Top End Region	Central Region
2005-2006	5172.3	5766.1	1403.8	1764.5
2006-2007	5197.4	5656.7	1284.2	1477.3
2007-2008	4969.8	5438.9	1468.8	2152.9

2008-2009	5124.1	5376.9	1407.4	2060.9
2009-2010	4809.8	7114.6	1256.0	1775.3
2010-2011	4527.4	7159.4	1263.0	1982.5
2011-2012	4727.9	7064.0	1021.0	1678.2
2012-2013	4706.2	6414.5	1114.4	1844.6
2013-2014	4447.1	6683.1	1017.6	2048.3
2014-2015	4345.2	7551.6	1012.0	2249.7
2015-2016	4587.6	6368.4	1046.6	2135.6
2016-2017	4812.7	5311.5	1096.8	2345.3
2017-2018	5151.6	5889.5	1044.5	2365.3

Source: Hospital data

8.3.1.6 Hospitalisations

Table 66 | Rate of hospitalisations due to all chronic conditions, NT, by Aboriginal status and gender, 2010-2018 (per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	148.1	42.8	162.6	25.2
2011	155.4	39.6	167.8	25.1
2012	197.6	54.3	244.5	38
2013	210.5	58.6	257.6	40.2
2014	215.8	55	274.7	39.8
2015	217.9	59	290	45.1
2016	231.1	65.9	310.1	50
2017	236.7	66.6	324.5	50.6
2018	241.5	70.1	337.2	53.2

Source: Hospital data

Table 67 | Rate of hospitalisations due to ischaemic heart disease, NT, by Aboriginal status and gender, 2010-2018 (per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	22.4	9.9	13.6	4.9
2011	25.3	9.8	15.4	4.6
2012	22	9.9	19.1	5.3
2013	24.6	11.2	21.3	5.5
2014	25	9.2	21.3	5.4
2015	22.6	8.8	19.9	4.3
2016	24.8	9.2	18.9	5
2017	21.6	8.8	17.3	4
2018	21	9.2	17	4.5

Source: Hospital data

Table 68 | Rate of hospitalisations due to hypertension, NT, by Aboriginal status and gender, 2010-2018 (per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	10.0	5	7.5	2.7
2011	8.5	3.9	6.4	3.1
2012	5.5	4	6.1	2.3
2013	6.2	4.1	5.6	2.5
2014	7.4	4.5	5.6	2.6
2015	7.8	3.7	6.8	2.5
2016	5.7	3.5	7.8	2.6
2017	8.9	3.7	5.9	2.5
2018	7.2	3.9	5.7	2.2

Source: Hospital data**Table 69 | Rate of hospitalisations due to renal failure, NT, by Aboriginal status and gender, 2010-2018 (per 100,000 population)**

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	44.5	12.3	43.7	8.1
2011	50.6	11.3	58.4	7.8
2012	72.3	15.3	99.4	11.1
2013	90.5	18.4	118	12.1
2014	86.3	15.7	122.3	11.3
2015	25.7	6.6	43.3	6.2
2016	24.4	7.5	37.6	6.1
2017	25.7	8.2	42.2	7.2
2018	24.2	7.4	38.7	7.2

Source: Hospital data**Table 70 | Rate of hospitalisations due to chronic obstructive pulmonary disease, NT, by Aboriginal status and gender, 2010-2018 (per 100,000 population)**

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	37.2	9.8	34.4	7
2011	38.6	9.2	36.5	5.5
2012	38.3	10.8	34.5	7.3
2013	37.2	10.8	38.9	5.3
2014	41.9	10.5	36.1	5.9
2015	44.2	9.6	38	8.3
2016	40.1	11	45.4	8.6

2017	44.8	10.7	46.7	9.1
2018	50.7	11.3	49.3	9
Source: Hospital data				

Table 71 | Rate of hospitalisations due to rheumatic heart disease, NT, by Aboriginal status and gender, 2010-2018 (per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	3.0	0.2	5.1	0.3
2011	3.0	0.3	5.7	0.2
2012	4.0	0.5	8.6	0.2
2013	4.3	1.1	9.5	0.6
2014	4.2	0.9	12.5	0.7
2015	5.7	0.8	8.6	0.9
2016	5.7	0.9	7.8	0.6
2017	5.2	0.8	8.9	0.6
2018	4.1	0.4	10	0.6
Source: Hospital data				

Table 72 | Rate of hospitalisations due to smoking and alcohol related cancer, NT, by Aboriginal status and gender, 2010-2018 (per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	5.9	4.6	4.3	1.6
2011	8.4	5	3.8	1.5
2012	5.8	4	5.5	2.4
2013	8	4.6	3.4	2.3
2014	10.1	3.9	3.2	1.6

2015	11.5	5	2.3	1.5
2016	18.4	8.6	5.4	3.4
2017	10.1	8.3	3.6	5
2018	11.5	9.9	5.8	4.4

Source: Hospital data

Table 73 | Rate of hospitalisations due to smoking and alcohol related cancer, NT, by Aboriginal status and gender, 2010-2018 (per 100,000 population) – DO NOT USE – INCORRECT DATA

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	56.2	10.1	74.8	4.0
2011		6.9	79.6	4.3
2012	126.4		182.6	16.5
2013	140		194	19.1
2014	135.6	26.2		18.7
2015	150.9	31.6	225.9	
2016	156	33.4	240	5.1
2017	160.5	33.3	251.4	23.9
2018	162.8	33.5	252	23.2

Source: Hospital data

Table 74 | Rate of hospitalisations due to diabetes, NT, by Aboriginal status and gender, 2010-2018 (per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	56.2	10.1	74.8	4.0
2011	53.9	6.9	79.6	4.3
2012	126.4	24.5	182.6	16.5

2013	140	27.4	194	19.1
2014	135.6	26.2	203.9	18.7
2015	150.9	31.6	225.9	21.5
2016	156	33.4	240	25.1
2017	160.5	33.3	251.4	23.9
2018	162.8	33.5	252	23.2

Source: Hospital data

Table 75 | Rate of hospitalisations due to diabetes, NT, by Aboriginal status and gender, 2010-2018 (per 100,000 population)

Year	Male		Female	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2010	3.2	3.2	3.9	3.9
2011	3.9	4	5.8	3.6
2012	4.8	4.5	6.1	4.3
2013	3.8	4.6	6.6	5.5
2014	2.7	3.7	4.8	5.2
2015	5.3	3.8	5.8	7.1
2016	5	4.6	7.4	6.6
2017	4.6	5.1	8.4	6.2
2018	7	5.2	8.9	8.9

Source: Hospital data

8.4 Key Action Area 2

Table 76 | Per capita alcohol consumption, NT, 2010-2017

	2010	2011	2012	2013	2014	2015	2016	2017
Litres per person	13.4	13.2	13.31	12.82	12.06	11.73	11.9	11.55

Source: NT Wholesale Alcohol Supply (Department of the Attorney-General and Justice)

Table 77 | Percentage of people aged 14 years and over who are daily smokers, NT, by gender, 2010-2018

Year	Male	Female
2010	27.5	16.8
2013	23.8	18.5
2016	18.6	15.7
2018	20.9	16.4

Source: National Health Survey 2017-18 and National Drug Strategy Household Survey 2016.

Note: 2018 value is for Financial Year 2018 and is for people aged 15 years and over.

Table 78 | Percentage of people who are overweight or obese, NT, by age group and health service, 2010-2018

Year	TEHS			CAHS		
	0-15 years	16-55 years	56+ years	0-15 years	16-55 years	56+ years
2010	4.7	55.4	59.6	11.3	77.6	74.6
2011	5.4	49.5	58.8	12.8	74.3	71.8
2012	6.1	51.0	57.1	13.1	77.9	70.6
2013	6.2	47.5	52.9	15.6	73.3	69.2
2014	6.7	47.2	51.1	19.6	74.7	72.8
2015	6.0	48.2	51.6	13.0	74.5	71.9
2016	7.0	46.9	49.5	15.3	74.3	73.1
2017	6.7	47.1	46.7	14.9	72.3	73.6
2018	7.6	46.6	47.8	14.0	74.6	69.2

Source: PCIS

8.4.1 Key Action Area 3

Table 79 | Number of health checks, NT, by MBS item number, 2011-2019 (financial years)

	701 (brief)	7030 (standard)	705 (long)	(707 prolonged)
2011	188	503	320	463
2012	160	828	298	359
2013	301	1,569	593	445
2014	287	1,187	635	535
2015	338	849	739	556
2016	198	850	769	679
2017	288	1,315	738	655
2018	318	1,273	647	670
2019	249	1,298	690	779

Source: MBS Reporting

Table 80 | Rate of health checks for Aboriginal and Torres Strait Islander people (MBS item 715), NT, by gender, 2011-2019 (financial years)

	Male	Female
2011	4,922	5,713
2012	5,772	6,899
2013	6,630	8,249
2014	7,899	9,641
2015	8,019	9,590
2016	9,269	10,991
2017	9,722	12,182
2018	11,265	13,677
2019	10,196	12,406

Source: MBS Reporting

Table 81 | Age-standardised breast cancer screening rates, women aged 50-69 years, NT, by Aboriginal status and health service, 2011-2017 (financial years)

	Aboriginal		Non-Aboriginal	
	TEHS	CAHS	TEHS	CAHS
2011	24.5	30.3	44.4	43.9
2013	28.0	29.0	44.0	41.5
2015	25.0	25.8	39.2	42.7
2017	27.2	25.8	41.5	39.5

Source: Australian Bureau of Statistics

Table 82 | Age-standardised cervical cancer screening rates women aged 20-69 years, NT, by Aboriginal status and health service, 2012-2016 (financial years)

	Aboriginal		Non-Aboriginal	
	TEHS	CAHS	TEHS	CAHS
2012	49.0	50.6	52.7	54.2
2014	46.9	51.4	54.7	50.8
2016	48.7	46.8	53.4	46.4

Source: Australian Bureau of Statistics

Table 83 | Bowel cancer screening rates for people aged 50-74 years, NT, by health service, 2007-2017 (biennial financial years)

	Male	Female
2007-2009	1.6	1.8
2010-2013	1.8	2.2
2014-2017	1.9	2.3

Source: Australian Bureau of Statistics

8.4.2 Key Action Area 5

Table 84 | Rate of GP management plans, NT, by gender, 2011-2019 (financial years)

	Male	Female
2011	3,213	3,918
2012	3,760	4,565
2013	4,602	5,433
2014	5,210	6,079
2015	5,341	6,308
2016	6,561	7,542
2017	7,017	8,156
2018	7,836	9,181
2019	7,568	8,999

Source: MBS Reporting

Table 85 | Rate of team care arrangements, NT, by gender, 2011-2019 (financial years)

	Male	Female
2011	2,172	2,860
2012	2,889	3,649
2013	3,581	4,520
2014	4,243	5,191
2015	4,298	5,348
2016	5,150	6,231
2017	5,710	7,005
2018	6,613	8,142
2019	6,262	7,945

Source: MBS Reporting

8.4.3 Key Action Area 6

Table 86 | Percentage of FTE NT Health staff who identify as Aboriginal or Torres Strait Islander, 2010-2020

	Percentage of FTE (%)
2010	5.9
2011	5.8
2012	6.0
2013	6.2
2014	6.3
2015	6.7
2016	7.5
2017	8.1
2018	7.8
2019	7.5
2020	7.7

Source: NT Government Department of Corporate and Information Services

Table 87 | Number of FTE NT Health staff who identify as Aboriginal or Torres Strait Islander, for AHPs, medical, and nursing staff, 2010-2019

	AHPs	Medical	Nursing
2010	78.0	1.6	14.5
2011	73.1	0.9	16.6
2012	63.2	2.7	25.3
2013	59.8	3.0	25.3
2014	59.4	2.9	26.5
2015	60.1	4.1	34.5
2016	55.5	6.8	46.4
2017	56.4	8.9	51.3

2018	59.6	8.9	54.8
2019	56.3	10.1	54.6

Source: NT Government Department of Corporate and Information Services

8.4.4 Key Action Area 7

Table 88 | Consumers registered for NT My eHealth Record, 2010-2018 (financial years)

	Number of registrations
2010	35844
2012	47989
2015	67055
2018	74388

Source: My eHealth Record. Data provided by NT Department of Health.

Table 89 | Total telehealth occasions of service by health service, NT, 2009-10 to 2018-19 (financial years)

	CAHS	TEHS
2010	0	31
2011	0	29
2012	0	57
2013	14	257
2014	177	405
2015	852	848
2016	1577	1371
2017	1960	2946
2018	1917	4459
2019	2010	4943

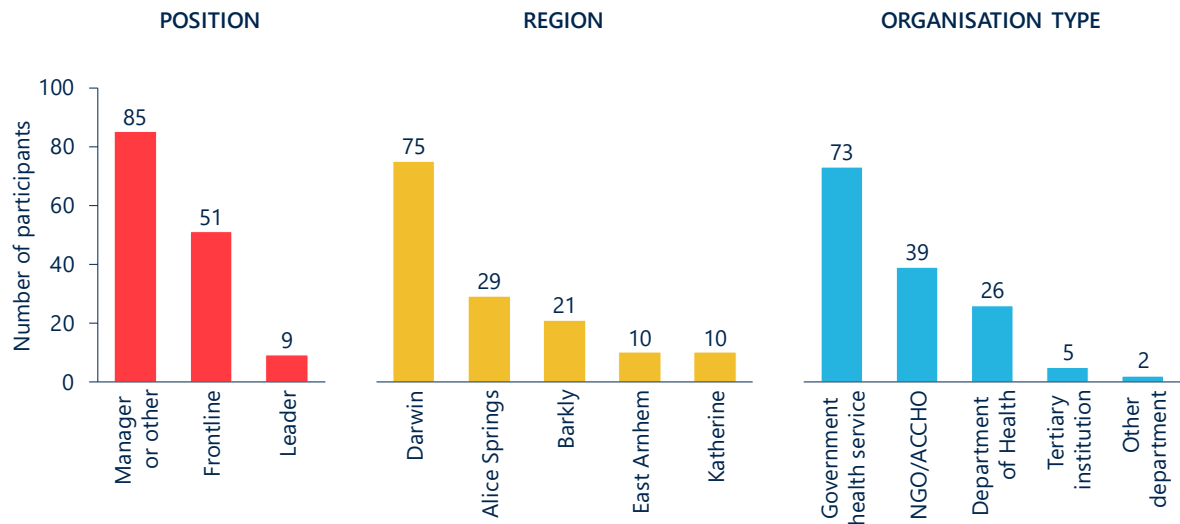
Source: Caresys, Data Management and System Reporting

Appendix C Interview and focus group guides

C.1 Profile of interview and focus group participants

Nous conducted focus groups and interviews with 145 people across the NT as part of the consultation phase of the evaluation. Figure 72 below provides an overview of the types of people consulted.

Figure 72 | Profile of stakeholders consulted through focus groups and interviews



C.2 Interview and focus group guide for front line staff, managers and others

Introduction

Who are we?

- Our names are [MODERATORS PRESENT].
- We work for a company called Nous Group.
- Nous Group has been contracted by the Department of Health to evaluate the Northern Territory Chronic Conditions Prevention and Management Strategy 2010-2020.
- We will be speaking to representatives from a range of organisations, including government agencies, Aboriginal Community Controlled Health Organisations, research institutions and others, as well as reviewing information from other sources.

What is the Strategy?

Give participants handout providing an overview of the Strategy (see Page 6).

- The Strategy provides a framework for building and strengthening a system-wide response to prevent and reduce the impact of chronic conditions across the continuum of care for people in the NT.
- It aims to improve the health and wellbeing of Territorians by reducing the incidence and impact of chronic conditions.
- It includes eight key action areas.
- We will provide additional information about the Strategy to inform the discussion as we go.

What will we ask you about?

- We are trying to understand how well the Strategy was rolled out, how well it worked, and how it could be made better.
- It's OK if you don't know much about the Strategy, as many of our questions ask about chronic conditions prevention and management in the NT in general.
- We will not ask about individual experiences of chronic conditions or care. And we ask that you do not provide us with identifying details of individual experiences of chronic conditions or care.
- Your participation in this consultation is voluntary. You don't have to talk to us if you don't want to. You can stop at any time or skip any questions at all.

What will happen to the information you provide?

- We will use the information we collect to write reports about the Strategy, which we will give to the Department of Health.
- In these reports, we will not refer to you by name or in a way that enables you to be identified.
- We will take notes during the discussion, which we will keep in a safe place that only people from the evaluation team can access.
- **[For focus groups]** We request that you maintain the confidentiality of the discussion.

Questions

Background

1. Please tell us about yourself and your role. How long have you been in your role/the NT health sector?
2. To what extent are you aware of the Strategy? When did you first hear about it?

Prevention of chronic conditions

3. How well is the NT performing in these areas?
 - a. Collaborating across organisations and sectors to address social determinants of health (i.e. broader social factors that influence health, such as living conditions, education and employment)
 - b. Promoting behaviours and environments that support good health.
4. Our work to date suggests:
 - a. There may have been an improvement in access to health services. For example, the number of health assessments for Aboriginal and Torres Strait Islander patients has increased.

- b. There has been good progress in addressing risk factors for chronic conditions, such as alcohol and tobacco consumption.

Is this consistent with your experience? How would you interpret this evidence?

5. How (if at all) is your organisation seeking to improve prevention of chronic conditions? **[For leaders and managers]** What resources is your organisation investing?

Prompt: examples could include activities, funding, lobbying (e.g. to secure Commonwealth investment), initiatives led by other organisations in which you are participating.

6. To what extent has the Strategy contributed in these areas?

Detection and management of chronic conditions

7. How well is the NT performing in these areas?

- a. Increasing early detection and management
- b. Embedding self-management in the day-to-day practice of care delivery
- c. Ensuring all Territorians have equal access to high-quality, evidence-based chronic care.

8. Our work to date suggests:

- a. Progress in improving early detection and management is mixed. For example, bowel cancer screening rates have increased, while breast cancer screening rates have decreased.
- b. There may have been an improvement in care for people with chronic conditions. For example, the number of patients with General Practitioner Management Plans has increased.

Is this consistent with your experience? How would you interpret this evidence?

9. How (if at all) is your organisation seeking to improve early detection and management of chronic conditions? **[For leaders and managers]** What resources is your organisation investing?

Prompt: examples could include activities, funding, lobbying (e.g. to secure Commonwealth funding), initiatives led by other organisations in which you are participating.

10. To what extent has the Strategy contributed in these areas?

Workforce, technology and continuous quality improvement

11. How well is the NT performing in these areas?

- a. Recruiting, developing and retaining a workforce appropriately skilled in preventing and managing chronic conditions.
- b. Having information and communication technologies that enable timely access to services.
- c. Embedding continuous quality improvement in day-to-day practice.

12. Our work to date suggests:

- a. There has been an increase in the proportion of the NT health workforce who are Aboriginal or Torres Strait Islander.
- b. There may have been improvements in information, communication and disease management systems. For example, uptake of telehealth has increased.

Is this consistent with your experience? How would you interpret this evidence?

13. How (if at all) is your organisation seeking to achieve better workforce planning and capability, information technology and continuous quality improvement in relation to chronic conditions? **[For leaders and managers]** What resources is your organisation investing?

Prompt: examples could include activities, funding, lobbying (e.g. to secure Commonwealth funding), initiatives led by other organisations in which you are participating.

14. To what extent has the Strategy contributed in these areas?

Areas for improvement

15. What are the enablers for preventing and managing chronic conditions in the NT?

Prompt: How well are different organisations and sectors working together?

16. What are the barriers for preventing and managing chronic conditions in the NT?

17. How can the strategy for the next decade (2020-2030) improve on the one for the current decade (2010-2020)?

Prompt: Going forward, is an NT-wide Strategy necessary (e.g. to guide evidence-based care and set strategic direction)?

If so, what form should it take? Which key action areas (either the eight current ones or others) are most important? What other initiatives and strategies should it link to?

If not, why not?

18. Do you have any other comments?

Handout

The Strategy aims to reduce the incidence and impact of chronic conditions through eight key action areas

It provides a framework for building and strengthening a system-wide response to chronic conditions for all people in the NT and across the continuum of care. It includes eight key action areas:

PREVENTION		EARLY DETECTION AND MANAGEMENT		WORKFORCE, TECHNOLOGY AND QUALITY IMPROVEMENT	
1	Addressing social determinants of health	3	Increasing early detection and management	6	Recruiting, developing and retaining a skilled workforce
2	Promoting behaviours and environments that reduce risk	4	Embedding self-management in day-to-day practice	7	Having technologies that enable timely access to services
		5	Ensuring equal access to high-quality, evidence-based care	8	Embedding continuous quality improvement in day-to-day care

HOW THE STRATEGY SOUGHT TO CONTRIBUTE: PREVENTION

KEY ACTION AREA	ACTIVITY
Collaboration across organisations and sectors to address social determinants of health	<ul style="list-style-type: none"> Raising health professionals' awareness of social determinants of health and their impact, including through conferences, workshops and forums, and an inter-sectoral approach to project and program design
Promotion of behaviours and environments that support good health and reduce the risk of chronic conditions	<ul style="list-style-type: none"> Developing a system to monitor and report on risk factors for chronic conditions Working toward establish healthy environments and workplaces Collaborative action on risk factors for chronic conditions

HOW THE STRATEGY SOUGHT TO CONTRIBUTE : EARLY DETECTION AND MANAGEMENT

KEY ACTION AREA	ACTIVITY
Increasing early detection and management of chronic conditions	<ul style="list-style-type: none"> Monitoring and reporting of risk factors for chronic conditions Increasing action on early prevention and detection markers for chronic conditions
Embedding self-management of chronic conditions in the day-to-day practice of care delivery	<ul style="list-style-type: none"> Providing self-management training to health professionals Developing and implementing a self-management framework Efforts to include an engagement tool in the NT Health electronic client health record
Ensuring all Territorians have equal access to high-quality, evidence-based chronic care	<ul style="list-style-type: none"> Monitoring and reporting of chronic conditions management (e.g. Adult Health Checks and other screening) Developing and implementing a chronic conditions management program, including decision support and a clinical information system Efforts to integrate chronic conditions models of care between acute and primary care Establishing chronic conditions networks (e.g. Diabetes Network, Cancer Network, Cardiac and Cardiac Rehab Network, Renal Working Group)

HOW THE STRATEGY SOUGHT TO CONTRIBUTE : WORKFORCE, TECHNOLOGY AND QUALITY IMPROVEMENT

KEY ACTION AREA	ACTIVITY
Recruiting, developing and retaining a workforce appropriately skilled in preventing and managing chronic conditions	<ul style="list-style-type: none"> • Training for health professionals in chronic conditions prevention and management • An annual diabetes symposium • An annual chronic conditions conference • A quarterly chronic conditions newsletter • An annual Continuous Quality Improvement forum • Increasing the chronic conditions workforce through Commonwealth-funded positions • Upskilling front line health professionals through the cycle of continuous quality improvement • Increasing the number of Aboriginal staff employed in the NT Health system
Having information and communication technologies that enable timely access to relevant services	<ul style="list-style-type: none"> • Developing an electronic client health record system • Population health reporting and communication on chronic conditions • Supporting coordination of care through contemporary information and communication technologies, including telehealth
Embedding continuous quality improvement in day-to-day practice	<ul style="list-style-type: none"> • Developing and implementing a Continuous Quality Improvement strategy • Establishing a Continuous Quality Improvement steering committee

C.3 Interview guide for leaders

Introduction

Who are we?

- Nous Group has been contracted by the Department of Health to evaluate the Northern Territory Chronic Conditions Prevention and Management Strategy 2010-2020.
- We are speaking to representatives from a range of organisations, including government agencies, Aboriginal Community Controlled Health Organisations, research institutions and others, as well as reviewing information from other sources.

What will we ask you about?

- We are trying to understand how well the Strategy was rolled out, how well it worked, and how it could be made better.
- Many of our questions ask about chronic conditions prevention and management in the NT in general.
- We will not ask about individual experiences of chronic conditions or care. And we ask that you do not provide us with identifying details of individual experiences of chronic conditions or care.
- Your participation in this consultation is voluntary. You don't have to talk to us if you don't want to. You can stop at any time or skip any questions at all.

What will happen to the information you provide?

- We will use the information we collect to write reports about the Strategy, which we will give to the Department of Health. In these reports, we will not refer to you by name or in a way that enables you to be identified.

- We will take notes during the discussion, which we will keep in a safe place that only people from the evaluation team can access.

Questions

1. How well has the NT performed in these areas over the past 10 years?
Prompt: In which areas are things getting better? In which areas are they getting worse?
2. What have been the key drivers of change (improvement or deterioration) in the prevention and management of chronic conditions in the NT over the past 10 years?
Prompt: examples could include NT or Commonwealth Government initiatives, non-government activities, technological advances, social/demographic shifts.
3. To what extent do you think the Strategy has contributed to prevention and management of chronic conditions in the NT over the past 10 years?
4. What are the enablers for preventing and managing chronic conditions in the NT? What are the barriers?
5. How effective are the governance arrangements for the Strategy? How could they be improved?
Prompt: Have they provided leadership and direction?
Have they driven implementation, monitoring and evaluation of the Strategy?
Have they facilitated collaboration between sectors involved in preventing and managing chronic conditions?
6. The current Strategy concludes this year. Looking forward to the next decade, does the NT need a chronic conditions prevention and management Strategy?
Prompt: If so, what form should it take? Which key action areas (either the eight current ones or others) are most important? What other initiatives and strategies should it link to?
If not, why not?
7. Do you have any other comments?

Handout

The Strategy aims to reduce the incidence and impact of chronic conditions through eight key action areas

It provides a framework for building and strengthening a system-wide response to chronic conditions for all people in the NT and across the continuum of care. It includes eight key action areas:

PREVENTION		EARLY DETECTION AND MANAGEMENT		WORKFORCE, TECHNOLOGY AND QUALITY IMPROVEMENT	
1	Addressing social determinants of health	3	Increasing early detection and management	6	Recruiting, developing and retaining a skilled workforce
2	Promoting behaviours and environments that reduce risk	4	Embedding self-management in day-to-day practice	7	Having technologies that enable timely access to services
		5	Ensuring equal access to high-quality, evidence-based care	8	Embedding continuous quality improvement in day-to-day care

Appendix D Survey instruments

D.1 Main survey

Evaluation of the Northern Territory Chronic Conditions Prevention and Management Strategy 2010-2020

Introduction

Nous Group has been contracted to evaluate the Northern Territory Chronic Conditions Prevention and Management Strategy 2010-2020

The evaluators will be speaking to people from a range of organisations, including government agencies, Aboriginal Community Controlled Health Organisations, research institutions and others, as well as reviewing information from other sources.

The Strategy aims to improve the health and wellbeing of all Territorians by reducing the incidence and impact of chronic conditions

It provides a framework for building and strengthening a system-wide response to chronic conditions for all people in the NT and across the continuum of care.

Further information about the Strategy can be found [here](#).

This survey seeks to test the usefulness of the Strategy in your work and for your organisation

It's OK if you don't know much about the Strategy, as many of the questions ask about chronic conditions prevention and management in the NT in general.

The survey is voluntary. You don't have to complete it if you don't want to. You can stop at any time or skip any questions at all.

The survey should take about **20 minutes** to complete. You can save your response and return to it later if you want to.

The survey will close at midnight on 28 February 2020.

The survey does not ask about individual experiences of chronic conditions or care. Please do NOT provide us with identifying details of individual experiences of chronic conditions or care.

The information you provide will remain confidential and secure

The information you provide will be used to write reports about the Strategy, which will be given to the Department of Health.

These reports will not refer to you by name or in a way that enables you to be identified.

Prevention of chronic conditions

This section asks about how well the NT is performing in relation to the prevention of chronic conditions. It also asks about how (if at all) the Strategy has contributed in this regard.

Background information about relevant activities that were included in the Strategy is included for your reference at the bottom of the section.

1) How well is the NT performing in the following areas?

	Very well 1	2	3	4	5	6	Very poorly 7	Don't know / can't choose
Collaboration across organisations and sectors to address social determinants of health	()	()	()	()	()	()	()	()
Promotion of behaviours and environments that support good health and reduce the risk of chronic conditions	()	()	()	()	()	()	()	()

2) Are things getting better or worse in the NT in the following areas?

	Much better 1	2	3	4	5	6	Much worse 7	Don't know / can't choose
Collaboration across organisations and sectors to address social determinants of health	()	()	()	()	()	()	()	()
Promotion of behaviours and environments that support good health and reduce the risk of chronic conditions	()	()	()	()	()	()	()	()

3) What is the rationale for your assessment of the NT's performance in these areas?

4) How (if at all) is your organisation contributing in these areas?

5) How (if at all) has the Strategy contributed in these areas?

6) Overall, how effective has the Strategy been in enabling progress in these areas?

	Much better 1	2	3	4	5	6	Much worse 7	Don't know / can't choose
Collaboration across organisations and sectors to address social determinants of health	()	()	()	()	()	()	()	()
Promotion of behaviours and environments that support good health and reduce the risk of chronic conditions	()	()	()	()	()	()	()	()

Information about how the Strategy sought to improve prevention of chronic conditions:

Key action area	Key ways the Strategy sought to enable to this
Collaboration across organisations and sectors to address social determinants of health	Raising health professionals' awareness of social determinants of health and their impact, including through conferences, workshops and forums, and an intersectoral approach to project and program design
Promotion of behaviours and environments that support good health and reduce the risk of chronic conditions	Developing a system to monitor and report on risk factors for chronic conditions Working toward establish healthy environments and workplaces Collaborative action on risk factors for chronic conditions

Detection and management of chronic conditions

This section asks about how well the NT is performing in relation to the early detection and management of chronic conditions. It also asks about how (if at all) the Strategy has contributed in this regard.

Background information about relevant activities that were included in the Strategy is included for your reference at the bottom of the section.

7) How well is the NT performing in the following areas?

	Much better 1	2	3	4	5	6	Much worse 7	Don't know / can't choose
Increasing early detection and management of chronic conditions	()	()	()	()	()	()	()	()
Embedding self-management of chronic conditions in the day-to-day practice of care delivery	()	()	()	()	()	()	()	()
Ensuring all Territorians have equal access to high-quality, evidence-based chronic care	()	()	()	()	()	()	()	()

8) Are things getting better or worse in the NT in the following areas?

	Much better 1	2	3	4	5	6	Much worse 7	Don't know / can't choose
Increasing early detection and management of chronic conditions	()	()	()	()	()	()	()	()
Embedding self-management of chronic conditions in the day-to-day practice of care delivery	()	()	()	()	()	()	()	()

Ensuring all Territorians have equal access to high-quality, evidence-based chronic care	()	()	()	()	()	()	()	()
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9) What is the rationale for your assessment of the NT's performance in these areas?

10) How (if at all) is your organisation contributing in these areas?

11) How (if at all) has the Strategy contributed in these areas?

12) Overall, how effective has the Strategy been in enabling progress in these areas?

	Much better 1	2	3	4	5	6	Much worse 7	Don't know / can't choose
Increasing early detection and management of chronic conditions	()	()	()	()	()	()	()	()
Embedding self-management of chronic conditions in the day-to-day practice of care delivery	()	()	()	()	()	()	()	()
Ensuring all Territorians have equal access to high-quality, evidence-based chronic care	()	()	()	()	()	()	()	()

Information about how the Strategy sought to improve early detection and management of chronic conditions:

Key action area	Key ways the Strategy sought to enable to this
Increasing early detection and management of chronic conditions	<p>Monitoring and reporting of risk factors for chronic conditions</p> <p>Increasing action on early prevention and detection markers for chronic conditions</p>
Embedding self-management of chronic conditions in the day-to-day practice of care delivery	<p>Providing self-management training to health professionals</p> <p>Developing and implementing a self-management framework</p> <p>Efforts to include an engagement tool in the NT Health electronic client health record</p>
Ensuring all Territorians have equal access to high-quality, evidence-based chronic care	<p>Monitoring and reporting of chronic conditions management (e.g. Adult Health Checks and other screening)</p> <p>Developing and implementing a chronic conditions management program, including decision support and a clinical information system</p> <p>Efforts to integrate chronic conditions models of care between acute and primary care</p> <p>Establishing chronic conditions networks (e.g. Diabetes Network, Cancer Network, Cardiac and Cardiac Rehab Network, Renal Working Group)</p>

Workforce, technology and continuous quality improvement

This section asks about how well the NT is performing in regard to various enablers for preventing, detecting and managing chronic conditions, including workforce capability, information and communications technology, and continuous quality improvement. It also asks about how (if at all) the Strategy has contributed in this regard.

Background information about relevant activities that were included in the Strategy is included for your reference at the bottom of the section.

13) How well is the NT performing in the following areas?

	Much better 1	2	3	4	5	6	Much worse 7	Don't know / can't choose
Recruiting, developing and retaining a workforce appropriately skilled in preventing and	()	()	()	()	()	()	()	()

managing chronic conditions								
Having information and communication technologies that enable timely access to relevant services	()	()	()	()	()	()	()	()
Embedding continuous quality improvement in day-to-day practice	()	()	()	()	()	()	()	()

14) Are things getting better or worse in the NT in the following areas?

	Much better 1	2	3	4	5	6	Much worse 7	Don't know / can't choose
Recruiting, developing and retaining a workforce appropriately skilled in preventing and managing chronic conditions	()	()	()	()	()	()	()	()
Having information and communication technologies that enable timely access to relevant services	()	()	()	()	()	()	()	()
Embedding continuous quality improvement in day-to-day practice	()	()	()	()	()	()	()	()

15) What is the rationale for your assessment of the NT's performance in these areas?

16) How (if at all) is your organisation contributing in these areas?

17) How (if at all) has the Strategy contributed in these areas?

18) Overall, how effective has the Strategy been in enabling progress in these areas?

	Much better 1	2	3	4	5	6	Much worse 7	Don't know / can't choose
Recruiting, developing and retaining a workforce appropriately skilled in preventing and managing chronic conditions	()	()	()	()	()	()	()	()
Having information and communication technologies that enable timely access to relevant services	()	()	()	()	()	()	()	()
Embedding continuous quality improvement in day-to-day practice	()	()	()	()	()	()	()	()

Information about how the Strategy sought to improve workforce capability, information and communication technology, and continuous quality improvement:

Key action area	Key ways the Strategy sought to enable to this
Recruiting, developing and retaining a workforce appropriately skilled in preventing and managing chronic conditions	<ul style="list-style-type: none"> Training for health professionals in chronic conditions prevention and management An annual diabetes symposium An annual chronic conditions conference A quarterly chronic conditions newsletter An annual Continuous Quality Improvement forum Increasing the chronic conditions workforce through Commonwealth-funded positions Upskilling front line health professionals through the cycle of continuous quality improvement Increasing the number of Aboriginal staff employed in the NT Health system

Having information and communication technologies that enable timely access to relevant services	Developing an electronic client health record system Population health reporting and communication on chronic conditions Supporting coordination of care through contemporary information and communication technologies, including telehealth
Embedding continuous quality improvement in day-to-day practice	Developing and implementing a Continuous Quality Improvement strategy Establishing a Continuous Quality Improvement steering committee

Enablers, barriers and areas for improvement

19) What are the enablers for preventing and managing chronic conditions in the NT?

20) What are the barriers to preventing and managing chronic conditions in the NT?

21) How can the strategy for the next decade (2020-2030) improve on the one for the current decade (2010-2020)?

22) Do you have any other comments about the Strategy?

About you

23) Do you live in the Northern Territory?

- Yes
- No
- I don't know

24) In which region of the Northern Territory do you live?

- Alice Springs region
- Barkly (Tennant Creek) region
- Darwin region

- East Arnhem (Nhulunbuy) region
- Katherine region
- Don't know / prefer not to say

25) What type of organisation do you work for?

- Government (e.g. a department or health service)
- Aboriginal Community Controlled Health Organisation (ACCHO)
- Not-for-profit organisation (other than an ACCHO)
- Research institution
- Tertiary institution
- Other - please specify: _____

26) Which of the following best describes your role in your organisation?

- Front line service delivery
- Middle management
- Leadership
- Other - please specify: _____

27) When did you first hear about the Northern Territory Chronic Conditions Prevention and Management Strategy 2010-2020?

- When it was being developed
- When it was introduced
- When I started in my current job
- When I was invited to participate in the evaluation
- Other - please specify: _____

Thank You!

D.2 Validation survey

Evaluation of the Northern Territory Chronic Conditions Prevention and Management Strategy 2010-2020: survey to validate consultation themes

Nous Group (Nous) has been contracted by the Northern Territory (NT) Department of Health (the Department) to evaluate the NT Chronic Conditions Prevention and Management Strategy 2010-2020.

As part of the evaluation, Nous has consulted people from a range of organisations, including government agencies, non-government organisations (NGOs), Aboriginal Community Controlled Health Organisations (ACCHOs), research institutions and others.

Nous and the Department initially intended to test the themes from the consultations through workshops in Darwin and Alice Springs. Due to the coronavirus pandemic, this survey is being conducted instead. This validation process is important as it will help to ensure that we correctly interpret what we heard from stakeholders.

Nous is also considering evidence from other sources including quantitative data, documentation and literature. This evidence is cited in this survey only if it was explicitly tested with stakeholders.

The survey seeks your feedback on the themes from the focus groups, interviews and survey Nous conducted across the NT in February 2020.

The primary audience for the survey comprises people who participated in these consultations. But you are welcome to complete the survey even if you did not participate in the consultations.

The survey is voluntary. You don't have to complete it if you don't want to. You can stop at any time or skip any questions at all.

The survey should take about **20-30 minutes** to complete. You can save your response and return to it later if you want to.

The survey will close at midnight on Monday, 13 April 2020.

Instructions:

On each page of the survey, you will see a summary of the themes about a particular topic, and you will be asked to answer a small number of questions.

If you are short on time:

- You can just read the themes themselves, which are in **bold**, and only read the more detailed bullet points when you would like more information.
- You can skip to the topics in which you are most interested or about which you have most to say.

If you have any questions, please contact Robert Sale from Nous (robert.sale@nousgroup.com.au).

Key Action Area 1: Social Determinants

Summary of preliminary findings

Awareness of social determinants is widespread among health professionals.

- Awareness of social determinants was widespread among interview and focus group participants, including the small number from the education sector, and survey respondents. For example, social determinants were the most commonly cited enablers for and barriers to improvement in chronic conditions prevention and management.
- Several stakeholders noted that the Strategy was the first of its kind in the NT to focus on social determinants and that it marked a shift from a purely clinical approach to chronic conditions.

Intersectoral collaboration to address social determinants is evident to varying degrees across the NT.

- Many health professionals said they were limited in their ability to influence social determinants, due to the scope of their roles and the fact that these issues cut across multiple sectors including but not limited to health.
- Stakeholders in all locations at all levels recognised the need for intersectoral collaboration to address social determinants. Examples were offered of such collaboration taking place between government and NGOs (including ACCHOs), between health and non-health organisations, and at the local and Territory levels, including:
 - the Department of Health advocating to other departments about social determinants such as housing
 - the ACCHO sector advocating for structural change via the National Aboriginal Community Controlled Health Organisation
 - Aboriginal Housing NT, a collaboration between AMSANT, the Northern Land Council, the Central Land Council and housing bodies across the NT
 - the Department of Local Government, Housing and Community Development working with mental health providers to keep tenants in public housing
 - Regional Coordination Committees that bring together senior NT government representatives and community leaders to address local issues
 - the People's Alcohol Coalition, an unincorporated association with members including individuals and organisations
 - health services partnering with local schools to provide education on health and nutrition
 - health professionals referring consumers to appropriate non-health services and vice versa.
- The extent of such collaboration appeared to vary between locations. In some locations a range of examples were identified, while in other locations few were identified. Front line stakeholders in some locations suggested such collaboration occurs reactively.
- Awareness of such collaboration varied by seniority of staff. It was greatest at the leader level, followed by the middle manager level; it varied among frontline staff.
- Stakeholders generally agreed more such collaboration is needed.

Health literacy remains low, despite improvements.

- Discussions about health literacy focused on Aboriginal consumers and communities.
- Stakeholders generally agreed that health literacy remains low, though it does vary between consumers and communities.
- Some stakeholders reported improvements in understanding of particular conditions (e.g. diabetes) and how to seek assistance (e.g. to quit smoking).
- Many stakeholders cited the need to ensure services and educational resources for consumers are culturally appropriate (e.g. by using interpreters, providing them in first languages and having Aboriginal staff deliver them).

Access to health services may have improved.

- The evaluation framework included access to health services as an indicator for social inequity. Quantitative data for this indicator was unavailable. However, the large increase in health checks (discussed further under Key Action Area 3) suggests access to health services may have improved.

There has been limited improvement in the social determinants themselves.

- Stakeholders generally agreed there has been limited improvement in the social determinants of health. The most commonly cited social determinant in this regard was housing. Others that were commonly cited including employment and economic participation, education, justice, and food and water security.

1) To what extent are these findings consistent with your experience and understanding?

- Strongly consistent Somewhat consistent Neither consistent nor inconsistent
 Somewhat inconsistent Strongly inconsistent Don't know / can't choose

2) Please provide a rationale for your response to the question above:

Key Action Area 2: Primary Prevention to Prevent Risk Factors

Summary of preliminary findings

There has been a reduction in alcohol consumption.

- From 2010 to 2017, there was a statistically significant decrease in the volume of alcohol consumed in the NT (of 14%) (NT Department of the Attorney-General and Justice, 2019).
- Stakeholders attributed the reduction in alcohol consumption to reforms identified as preventative actions in the Strategy (such as the Banned Drinkers Register). Most did not directly associate these with the Strategy.
- Some stakeholders identified unintended consequences of supply reduction measures, such as black markets, consumption being displaced to other locations, and individuals being pressured into purchasing alcohol on behalf of others.

There has been a reduction in smoking rates, but this may not extend to remote communities.

- From 2010 to 2018, there was a statistically significant decrease in the percentage of people aged 14 years or older who were daily smokers, of 24% among men and 2% among women (Australian Institute of Health and Welfare, 2016; Australian Bureau of Statistics, 2019).
- While the quantitative data suggests a decline in the prevalence of daily smoking in the NT, stakeholders generally believed smoking rates had declined far less, if at all, in remote communities. This anecdotal evidence is supported by national-level Australian Bureau of Statistics data on smoking rates in remote communities (2019).
- Stakeholders commonly attributed the decline in tobacco smoking to tobacco taxation. Some also attributed the decline to reforms identified as preventative actions in the Strategy (such as smoke free spaces). Most did not associate these activities with the Strategy.
- Several stakeholders said the NT Government under-invests in measures such as public education campaigns relative to other jurisdictions.

Food security is a continuing challenge.

- Many stakeholders indicated food security is a continuing challenge, due to limited affordability, availability and variety of healthy food, particularly in remote communities.
- Stakeholders also noted the difficulty of shifting people's food preferences and behaviours, particularly where there are strong incentives to purchase unhealthy options; for example, lower prices than healthy options.
- Stakeholders from outside the health sector highlighted the role of schools in teaching students about nutrition and exercise (as well as alcohol and tobacco).

There have been improvements in infrastructure in Darwin.

- Stakeholders reported there has been investment in infrastructure for exercise (e.g. parks, paths, exercise equipment), but that this has primarily been in Darwin.

3) To what extent are these findings consistent with your experience and understanding?

- Strongly consistent Somewhat consistent Neither consistent nor inconsistent
 Somewhat inconsistent Strongly inconsistent Don't know / can't choose

4) Please provide a rationale for your response to the question above:

Key Action Area 3: Early Detection and Secondary Prevention

Summary of preliminary findings

Stakeholders generally agreed there has been improvement in early detection of chronic conditions.

- This was one of two Key Action Areas in which stakeholders generally thought the NT was performing best.
- Several stakeholders mentioned there is now more professional development and resources for early detection (e.g. training and guidelines).
- Examples of good performance in this area identified in the consultations included uptake of health checks, greater emphasis on screening, and increased workforce capacity (for example, outreach teams).
- Monitoring and reporting of chronic conditions prevention and management (including risk factors) was identified as an improvement. High quality data is collected and reported through the Traffic Light Reports, the NT AHKPIs) and the nKPIs. This data is provided to primary health care providers to inform service delivery. It also informs policy (for example, by enabling assessment of system performance).

There have been increases in uptake for all types of health checks.

- From 2011 to 2019, there were large increases in the number of all types of health checks, including those with Medicare Benefits Schedule (MBS) item numbers 701 (32%), 703 (158%), 705 (116%), 707 (68%) and 715 (107% for men and 117% for women) (Medicare). These increases were statistically significant for all item numbers bar 701 and 703.
- Stakeholders attributed the increase in health checks to efforts on the part of service providers to increase MBS funding and meet KPIs. However, there is evidence that increases in health checks, MBS

funding and KPI achievement could result from efforts to improve quality, innovation and continuity of care.

- While some stakeholders viewed health checks as beneficial, many were sceptical about their impact on consumers' health outcomes (e.g. due to a lack of services to which refer to them).

Cervical and breast cancer screening rates have decreased for some population groups.

- From 2011 to 2017, in Central Australia, there was a statistically significant decrease in the breast cancer screening rate for Aboriginal people (of 15%) and non-Aboriginal people (of 10%). In the Top End, there was an increase for Aboriginal people (of 11%) and a decrease for non-Aboriginal people (of 6%), but these were not statistically significant (Australian Bureau of Statistics, 2019).
- From 2012 to 2016, there was a statistically significant decrease in the cervical cancer screening rate for non-Aboriginal women in Central Australia (of 14%). While there was a decrease for Aboriginal women in Central Australia (of 8%), this was not statistically significant. There was minimal change among women in the Top End (Australian Bureau of Statistics, 2019).
- From 2007 to 2017, there was an increase in the bowel cancer screening of 21% for men and 29% for women (Australian Bureau of Statistics, 2019).

5) To what extent are these findings consistent with your experience and understanding?

- Strongly consistent Somewhat consistent Neither consistent nor inconsistent
 Somewhat inconsistent Strongly inconsistent Don't know / can't choose

6) Please provide a rationale for your response to the question above:

Key Action Area 4: Self-management

Summary of preliminary findings

The NT Chronic Conditions Self-management Framework was implemented.

- Stakeholder awareness of it was limited outside the Department of Health. This may reflect that it was introduced early in the life of the Strategy and that turnover is high among health professionals in the NT health system.

Self-management training for health professionals was offered, but several factors reduced its uptake.

- The training offered included face-to-face training and online e-Learning modules, some of which included content relating to self-management.
- Awareness of these training opportunities was variable among stakeholders, both between and within locations. Some had participated in self-management training or were aware it was available, while others indicated there was no or insufficient training.
- Potential barriers to uptake of the training included staff turnover, high workloads, internet capability, computer access, and "essential" training taking precedence over "non-essential" training.

There is mixed evidence about the extent to which self-management is embedded in care.

- Stakeholders generally acknowledged the importance of self-management, and it was recognised that the extent to which self-management is practiced or supported varies between individuals, communities and health professionals.

- However, they held mixed views about the extent to which it is embedded in the day-to-day practice of care delivery. For example, 39% of survey respondents indicated the NT was getting worse in this area, compared to 36% who indicated it was getting better.
- Enablers for self-management that were identified included:
 - strong relationships between health professionals and consumers
 - hospitals providing consistent education and follow-up support
 - tailoring of self-management plans to individuals and communities (including by addressing potential language barriers).
- Barriers that were identified included:
 - health professionals having low understanding of self-management or defaulting to case management in the belief this was necessary to achieve KPIs
 - a lack of culturally appropriate programs and resources (including in first languages)
 - social determinants (including low general literacy)
 - insufficient support for behaviour change
 - staff turnover
 - complexity of self-management tools
 - competing priorities in consumers' lives (e.g. crises taking priority)
 - lack of funding for time health professionals spend supporting self-management.
- Several stakeholders expressed the view that self-management is inappropriate in certain circumstances; for example, for consumers in particularly difficult/crisis circumstances or where case management approaches are working effectively.

7) To what extent are these findings consistent with your experience and understanding?

- Strongly consistent
 Somewhat consistent
 Neither consistent nor inconsistent
 Somewhat inconsistent
 Strongly inconsistent
 Don't know / can't choose

8) Please provide a rationale for your response to the question above:

Key Action Area 5: Care for People with Chronic Conditions

Summary of preliminary findings

Uptake of care plans, which provide a proxy for consumers with chronic conditions receiving best practice care, has increased.

- From 2011 to 2019, there were statistically significant increases in the number of GP management plans, of 136% among men and 130% among women (Medicare).
- Over this same period, there were statistically significant increases in the number of team care arrangements, which more than doubled among both men and women (Medicare).
- As with health checks, stakeholders attributed increases in the number of care plans to efforts on the part of health service providers to increase MBS funding and meet KPIs, and many were sceptical

about their impact on consumers' health outcomes; for example, because the plans may not be followed.

- However, care plans were also commonly raised as an example of improvement; for example, encouragement of staff to identify conditions early and develop care plans, inclusion of care plans in electronic client health information systems; and use of care plans to support self-management.

Stakeholders described ongoing difficulties in achieving integrated, coordinated care.

- Some stakeholders said the integration between primary and acute settings was improving, however, in general it was viewed as challenging; for example, due to workforce shortages leading to a reactive acute focus, and siloes and poor communication between primary and acute services even within organisations. Stakeholders made various suggestions to improve connections between primary and acute care, such as joint planning and funding, and dedicated staff to focus on the transition.
- Stakeholders referenced several challenges to achieving coordinated care. These included comorbidities, increasing sub-specialisation, a lack of care coordinators (and insufficient funding for care coordinators), and programs, initiatives and funding arrangements that focus on body parts or physiological systems.

Stakeholders held mixed views about the accessibility of care.

- Stakeholders in some locations reported improvements in access to care; for example, greater access to specialists in remote communities (including via telehealth) and increased numbers of Remote Medical Practitioners.
- However, stakeholders also identified substantial barriers to access, including services being culturally inappropriate and consumers having other priorities or "clinic fatigue". Stakeholders in a smaller location also highlighted limited local resources and services and consumers needing to travel long distances and/or wait long periods for care.

9) To what extent are these findings consistent with your experience and understanding?

- Strongly consistent Somewhat consistent Neither consistent nor inconsistent
 Somewhat inconsistent Strongly inconsistent Don't know / can't choose

10) Please provide a rationale for your response to the question above:

Key Action Area 6: Workforce Planning and Development

Summary of preliminary findings

Overall, there has been improvement in the employment of a workforce appropriately skilled in chronic conditions prevention and management.

- Improvement is evident in the availability and uptake of training in chronic conditions prevention and management; increasing representation of Aboriginal staff in the Department, Top End Health Service (TEHS) and Central Australia Health Service (CAHS); and recruitment of staff.
- However, there is concern about decreasing numbers of Aboriginal Health Practitioners (AHPs)*, and retention is an ongoing issue.
- These issues are discussed in turn below.

There is a range of professional development opportunities available to health professionals; there are also barriers to accessing them, particularly for more remote staff.

- The health professionals consulted were generally aware of professional development opportunities relating to chronic conditions, including those undertaken under the Strategy and others. Many had participated in them and found them beneficial. Some mentioned the e-learning courses and support provided by NT Government to access training.
- Awareness and uptake of these opportunities was limited by several factors, particularly remoteness (for example, health professionals in a more remote location reported it was difficult to cover their positions during absences due to the small size of the workforce).

Representation of Aboriginal staff in the Department, TEHS and CAHS has increased.

- From 2010 to 2020, there was a statistically significant increase in the proportion of FTE NT Health staff who identified as Aboriginal (of 30%) (NT Department of Corporate and Information Services, 2019).
- The most commonly cited reason for this increase was the NT Government's Special Measures initiative.
- Suggestions for further improving representation of Aboriginal staff included more flexible working arrangements (e.g. cultural leave), study pathways and mentoring.

There is concern about decreasing numbers of AHPs.

- The number of AHPs has fallen over the life of the Strategy, from over 250 in 2012 to less than 220 in 2019 (Aboriginal and Torres Strait Islander Health Practice Board, 2019). However, stakeholders suggested the number was substantially higher than this in the decades before the strategy.
- Numerous factors were suggested as contributing to this decline; for example, need to travel away from home for training; the reclassification of "AHP" as a protected title with registration requirements; a lack of prestige, respect, or feeling valued by colleagues; unattractive incentives; humbugging; and others.

Stakeholders generally agreed recruitment of appropriately skilled staff had improved, but that retention is an ongoing issue.

- Stakeholders indicated that there had been a focus on recruitment or that they had seen improvements over time. Examples included Commonwealth-funded positions, an increase in Preventable Chronic Conditions Educators and health promoters, and efforts in bulk recruitment.
- Many stakeholders said workforce retention was an ongoing issue, particularly in remote areas. This reportedly has a negative impact on workforce capacity, quality and continuity of care, and community engagement and relationships.

**In this survey, the term "AHP" is used to refer to individuals who hold this title under the Aboriginal and Torres Strait Islander Health Practice Board. It excludes other Aboriginal health professionals (for examples, doctors).*

11) To what extent are these findings consistent with your experience and understanding?

- Strongly consistent Somewhat consistent Neither consistent nor inconsistent
 Somewhat inconsistent Strongly inconsistent Don't know / can't choose

12) Please provide a rationale for your response to the question above:

Key Action Area 7: Information, Communication and Disease Management Systems

Summary of preliminary findings

Technology has improved access to appropriate chronic conditions prevention and management services.

- Improvement is evident in widespread access to electronic client health information systems, significant growth in My eHealth Record enrolments, and high uptake of Telehealth.
- However, stakeholders raised concerns about fragmentation between IT systems, particularly between the government and ACCHO sectors, and identified requirements that must be addressed to fully realise telehealth's benefits.
- These issues are discussed in turn below.

All health providers have access to electronic client health information systems.

- These systems include the Primary Care Information System (PCIS), Communicare, My eHealth Record and disease registers such as the NT rheumatic heart disease register.
- Stakeholders generally agreed there had been improvement in these individual systems; for example, recall lists generated in PCIS.
- The forthcoming "Acacia" system was often raised. Many suggested this would contribute to further improvement, though some were disappointed it would not communicate with systems used in the ACCHO sector.

While there are difficulties in information sharing, there have been substantial improvements; for example, uptake of My eHealth Record.

- Stakeholders in all locations expressed frustration about the "fragmentation" of IT systems and the difficulty of sharing information between government and ACCHO sectors. For example, many referenced the incompatibility between the electronic client health inform systems used in the government sector, PCIS, and the ACCHO sector, Communicare.
- However, stakeholders in most locations recognised that, while sharing information is still difficult, it has improved. For example, My eHealth Record enables health services across the NT to access information stored in PCIS and Communicare as well as the Community Care and Hospital Information Systems.
- The number of people enrolled in My eHealth Record more than doubled, from around 36,000 in 2010 to around 74,000 in 2018 (My eHealth Record). This increase was statistically significant.

Technology has enabled improvements in access to care, via telehealth, for example.

- There was wide uptake of telehealth. In the Top End, the number of occasions of telehealth service increased from 31 in 2010 to around 4,900 in 2019. In Central Australia, the number increased from 0 in 2010 to around 2,000 in 2019 (Caresys). These increases were statistically significant.
- Benefits of telehealth have included financial savings, improved attendance at appointments, and reduced need for consumers to travel long distances to receive care.
- Stakeholders identified numerous requirements that must be addressed to fully realise the benefits of health, including additional staff to deliver it, education about how to use it, maintenance, facilities, and others.

Health professionals have access to decision support tools.

- PCIS includes decision support tools intended to improve clinicians' practice, such as a calculator that produces a cardiovascular risk assessment score. These were not explicitly discussed in consultations.

- The main decision support tool discussed was the CARPA Standard Treatment Manual. There is high awareness of the manual. Stakeholders indicated that it has been useful in setting expectations of care for chronic conditions.

13) To what extent are these findings consistent with your experience and understanding?

- Strongly consistent Somewhat consistent Neither consistent nor inconsistent
 Somewhat inconsistent Strongly inconsistent Don't know / can't choose

14) Please provide a rationale for your response to the question above:

Key Action Area 8: Continuous Quality Improvement

Summary of preliminary findings

The continuous quality improvement (CQI) strategy was implemented, and the CQI process is now widely practiced by health professionals.

- Stakeholders identified a variety of CQI activities that are taking place; for example, CQI facilitators driving ground level change, clinics applying for CQI accreditation and staff participating in CQI events.
- Stakeholders reported a high level of awareness of and/or participation in CQI forums and collaboratives.

The role of CQI in improving service delivery is embedded in the day-to-day practice of care.

- This was one of two Key Action Areas in which stakeholders generally thought the NT was performing best.
- Stakeholders widely agreed that CQI is now embedded in day-to-day practice.
- Several stakeholders suggested that CQI is now plateauing due to the low hanging fruit having been picked. Sustaining improvement may require greater change management capacity.
- Some people reportedly focus on the process rather than the outcomes, treating CQI as a box-ticking exercise.
- Competing demands and a lack of time and resources can distract attention from CQI.

15) To what extent are these findings consistent with your experience and understanding?

- Strongly consistent Somewhat consistent Neither consistent nor inconsistent
 Somewhat inconsistent Strongly inconsistent Don't know / can't choose

16) Please provide a rationale for your response to the question above:

The Impact of the Strategy

Summary of preliminary findings

The evaluation framework assumes stakeholders use and participate in the Strategy.

- The evaluation framework assumes government and non-government stakeholders:
 - use the Strategy to guide their strategies and actions
 - continually realign their investments to progress the Strategy
 - willingly and actively participate in developing, monitoring and reporting on the Strategy implementation plans.
- Under these assumptions, the evidence base for the evaluation suggests the Strategy and the activities undertaken in its Key Action Areas have contributed to improving the health and wellbeing of Territorians by reducing the incidence and impact of chronic conditions.

Nous' consultations suggest these assumptions apply more to government stakeholders than to non-government stakeholders.

- Nous' consultations suggest the assumptions are reasonable for government stakeholders, such as the Department and health services. For example, the Strategy has reportedly informed the Department's strategic plans, the health services' operational plans and the NT Aboriginal Health KPIs. They are more variable in their applicability to non-government stakeholders, some of which said they were unclear about their role in the Strategy.

17) To what extent are these findings consistent with your experience and understanding?

- Strongly consistent Somewhat consistent Neither consistent nor inconsistent
 Somewhat inconsistent Strongly inconsistent Don't know / can't choose

18) Please provide a rationale for your response to the question above:

Enablers and Barriers for Further Improvement

Summary of preliminary findings*

Social determinants

- Social determinants were the most commonly cited enablers and barriers for improvement in chronic conditions. Housing was the most commonly cited social determinant, along with employment, education, and food and water security.

Collaboration

- A common theme was the need to break down silos and improve planning, coordination and communication between organisations, both in the health sector and in other sectors, particularly to address social determinants.

Workforce capacity and continuity

- Many stakeholders highlighted a need for greater workforce capacity and continuity, particularly in remote communities, including through increased recruitment and retention of local staff.

Culturally appropriate services

- Stakeholders at all levels across sectors emphasised the importance of improving the cultural appropriateness of services, including through use of interpreters.

Funding

- Another common theme was the lack of funding and the complexity of funding arrangements for chronic conditions prevention and management.

**The most commonly cited enablers and barriers were generally the inverses of each other. For example, some stakeholders said that improving social determinants would enable improvement, while other stakeholders said social determinants are currently a barrier to improvement.*

19) To what extent are these findings consistent with your experience and understanding?

- Strongly consistent Somewhat consistent Neither consistent nor inconsistent
 Somewhat inconsistent Strongly inconsistent Don't know / can't choose

20) Please provide a rationale for your response to the question above:

Next strategy

Summary of preliminary findings

Stakeholders generally agreed the next strategy is necessary.

- Most thought the key action areas in the current Strategy are still relevant and provide a good framework for chronic conditions prevention and management.
- Some called for greater emphasis on particular areas, such as social determinants, or the addition of new areas, such as social and emotional wellbeing.
- A few thought a whole-of-government (potentially including the Commonwealth Government) strategy focused on social determinants would be more valuable.

An overarching theme was the need for clear priorities, actions, stakeholder responsibilities, performance indicators, outcomes and links between them.

- In particular, stakeholders suggested the next strategy should:
 - focus on achievable priorities
 - be more consistently monitored and evaluated
 - better ensure stakeholders understand their specific accountabilities.
- Crucially, the strategy itself would not necessarily articulate all of these elements, but it should clarify how it will be translated into action (e.g. through organisations' operational plans).

Other themes included the importance of leadership and government, the need for collaboration and consultation, and the necessity for additional funding.

- Stakeholders emphasised the importance of the leadership and governance of the next strategy, with some suggesting more senior commitment or even a whole-of-government approach is required, particularly to address social determinants.

- Another theme was the importance of developing the next strategy through a collaborative process involving stakeholders in both the government and non-government sectors, including ACCHOs.
- Another theme was that the next strategy must be supported with additional funding to be effective.

21) To what extent are these findings consistent with your experience and understanding?

- Strongly consistent Somewhat consistent Neither consistent nor inconsistent
 Somewhat inconsistent Strongly inconsistent Don't know / can't choose

22) Please provide a rationale for your response to the question above:

About you

23) Did you participate in the consultation process for the evaluation (in February 2020)?

- Yes, I attended a focus group or interview or completed the survey
 No, I did not
 Other - please specify: _____

24) Do you live in the NT?

- Yes
 No
 Prefer not to say

25) In which region of the NT do you live?

- Alice Springs region
 Barkly (Tennant Creek) region
 Darwin region
 East Arnhem (Nhulunbuy) region
 Katherine region
 Prefer not to say

26) What type of organisation do you work for?

- Government (e.g. a department of health service)
 ACCHO
 NGO (other than ACCHOs)
 Research or education institution

Prefer not to say

Other - please specify: _____

27) Which of the following best describes your role in your organisation?

Front line service delivery

Middle management

Leadership

Prefer not to say

Other - please specify: _____

Thank You!

Appendix E **Survey findings**

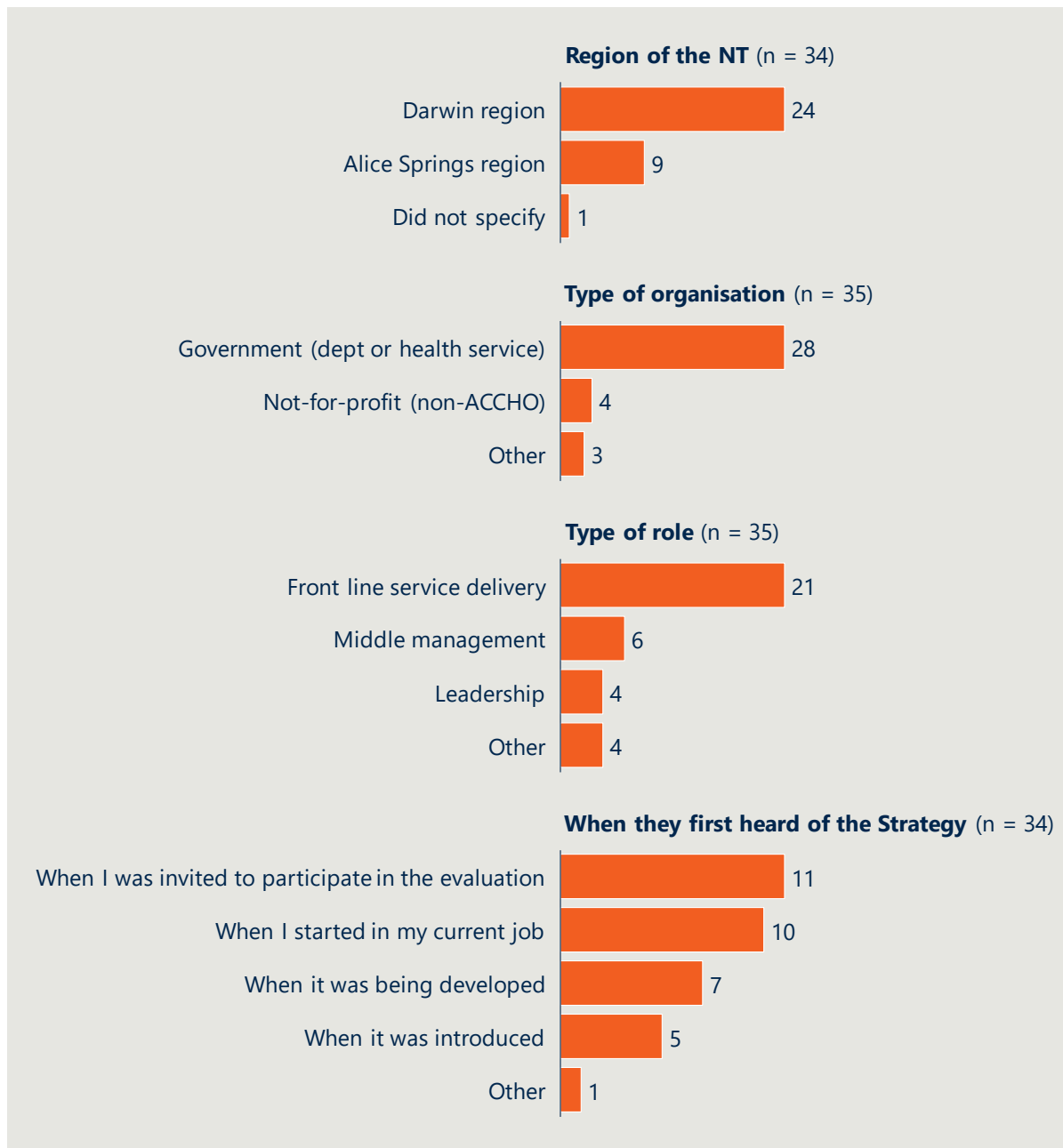
E.1 Full survey results

Nous ran an online survey as part of consultations during the evaluation. The survey had 35 responses. Respondents could respond to some questions in free text, and on others rated their answers on a numeric scale. This section presents themes, direct quotes and visualisations of their responses.

E.1.1 Profile of survey respondents

During the survey, participants were asked to specify which region of the NT they work in, which type of organisation they work for, their type of role, and when they had first heard of the Strategy. The responses are shown in Figure 73 below.

Figure 73 | Profile of main survey respondents



E.1.2 Key Action Area 1: Social determinants

Themes

- Many survey respondents noted a lack of improvement in social determinants. Inadequate housing and homelessness was mentioned most often, along with lack of employment and economic participation.
- There is not enough collaboration to address social determinants, including between health services, within the health sector, and with other sectors.
- However, some survey respondents mentioned that their organisations are actively collaborating with others, but many did not.

Quotes

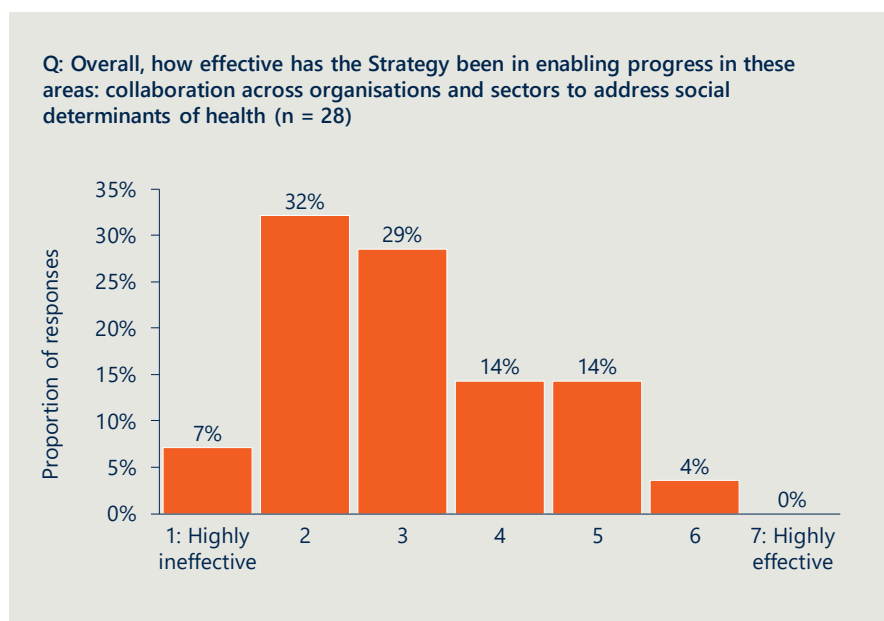
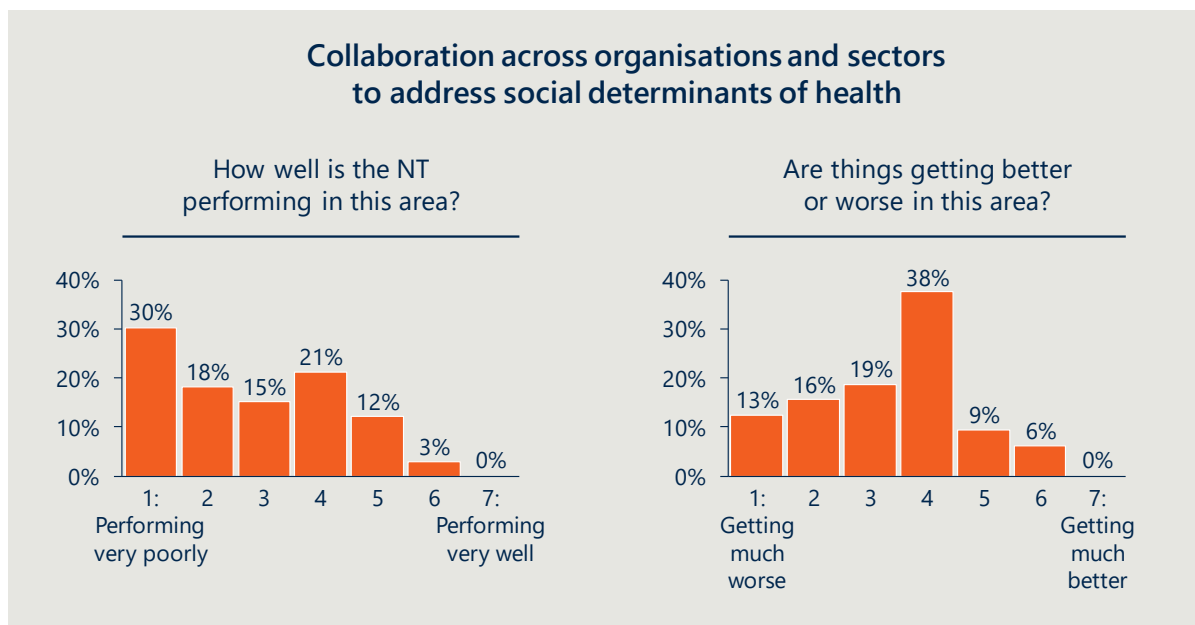
"the reality on the ground today in relation to the social determinants of health are dire"

"the current expectation of working in silo's is not doing much to rectify the bigger problem before us"

"Partnership in promotion of behaviours and environments is strong but appears to be individually driven rather than by the organisation."

Quantitative analysis

Figure 74 | Main survey results relating to Key Action Area 1



E.1.3 Key Action Area 2: Primary prevention – risk factors

Themes

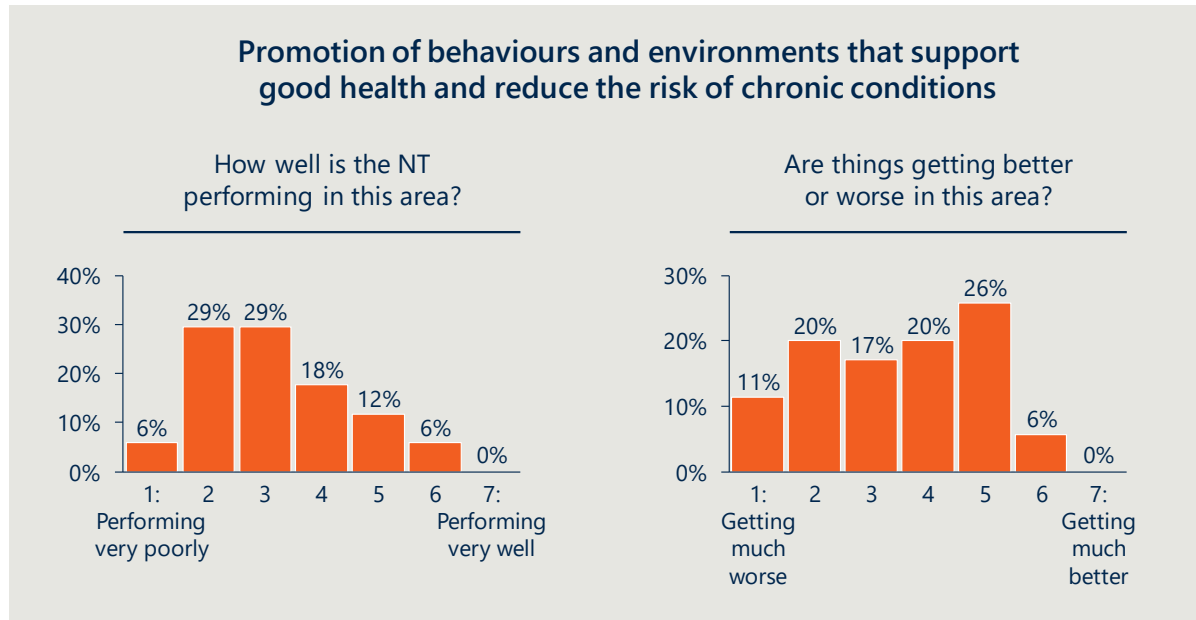
- Some survey respondents noted that collaboration and knowledge sharing in health promotion was good, or has been improving. Individual respondents mentioned examples such as exercise programs, engaging families and childhood programs.
- Survey respondents raised many risk factors which continue to add to the burden of disease. The most commonly mentioned included poor food security and lack of food choices, and tobacco and alcohol use.
- Lack of resources in language was often cited as a restriction on effective education and work in communities.
- Survey respondents regularly mentioned that acute care is usually given priority over prevention in terms of funding, resourcing and staff attention.

Quotes

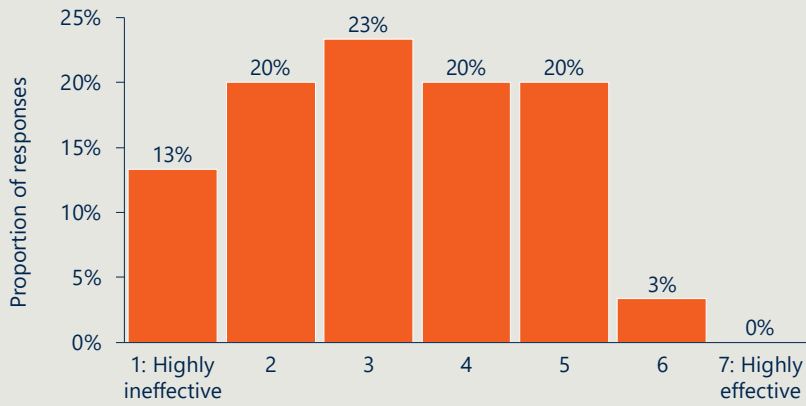
“Collaboration across organisations may be occurring at a higher level but health care providers on the ground are not involved and are unaware of progress in different locations”

Quantitative analysis

Figure 75 | Main survey results relating to Key Action Area 2



Q: Overall, how effective has the Strategy been in enabling progress in these areas: promotion of behaviours and environments that support good health and reduce the risk of chronic conditions (n = 30)



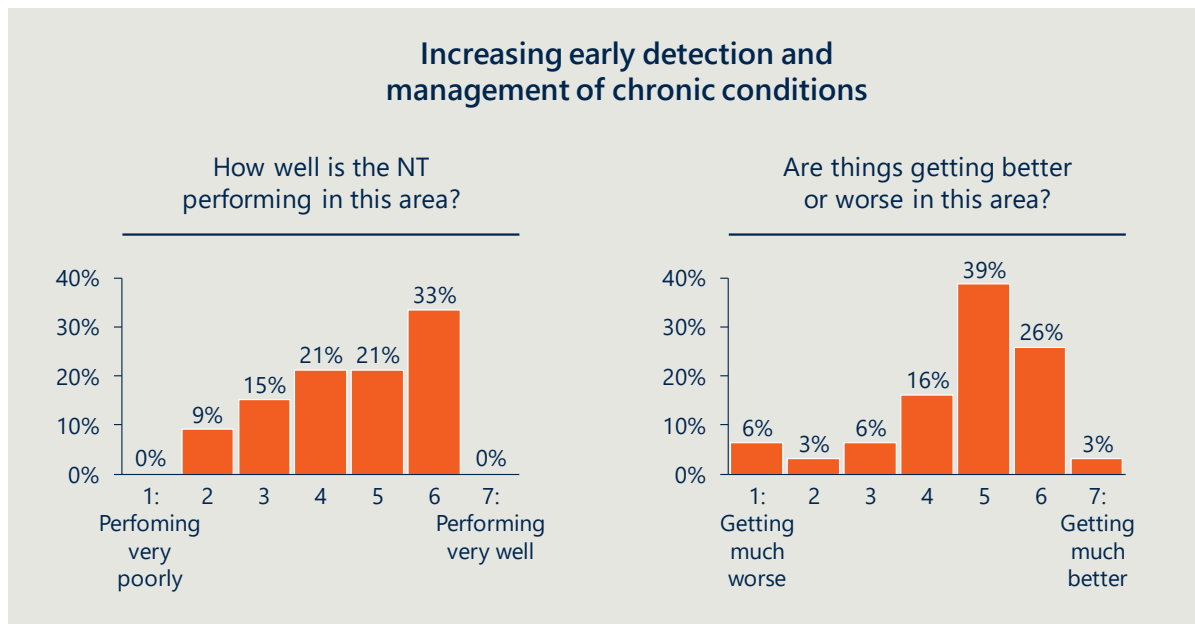
E.1.4 Key Action Area 3: Early detection and secondary prevention

Themes

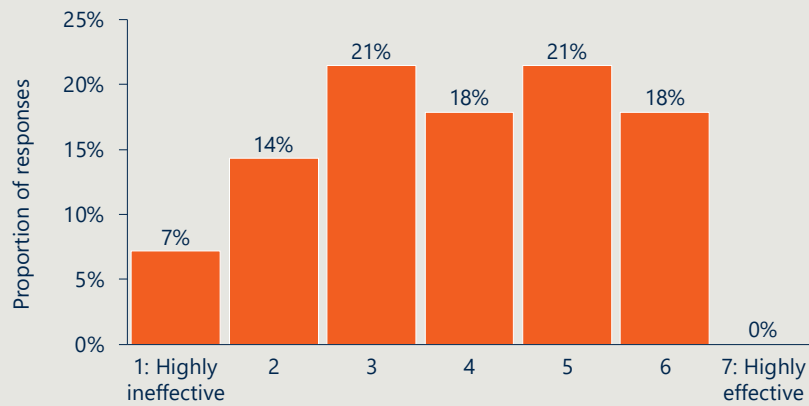
- Many survey respondents believed that detection and early intervention has improved. Examples given included increased use of care plans, regular health checks, and more emphasis on screening.
- Several respondents also mentioned that there was more workforce capacity and training for early detection. Individual examples given included outreach teams, training and conferences.

Quantitative analysis

Figure 76 | Main survey results relating to Key Action Area 3



Q: Overall, how effective has the Strategy been in enabling progress in these areas: Increasing early detection and management of chronic conditions (n = 28)



E.1.5 Key Action Area 4: Self-management

Themes

- Not many survey respondents mentioned self-management. Those who did tended to take the view that it was not working well. Various reasons were given, including lack of workforce capacity or skills to support self-management, lack of social determinants and healthy environments, and lack of resources in language.

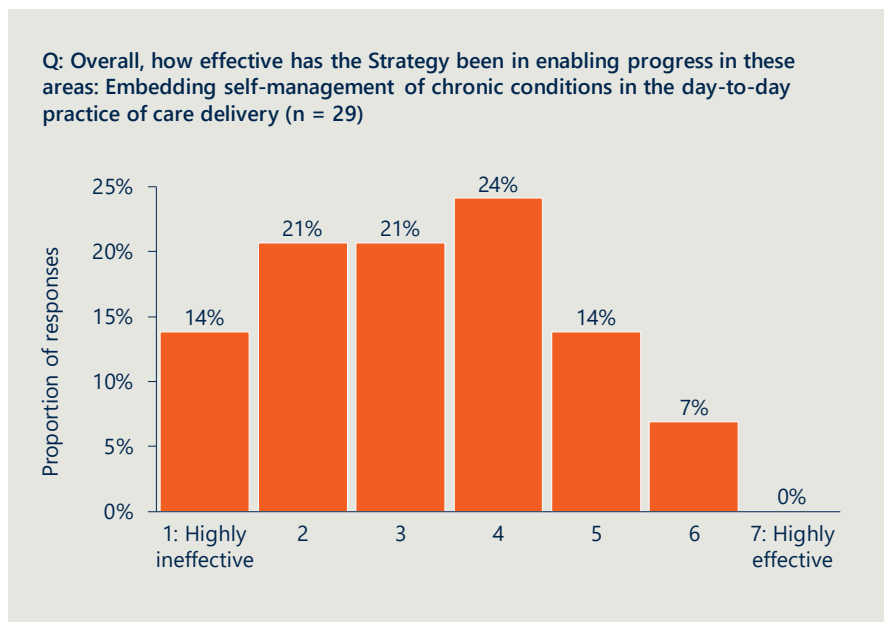
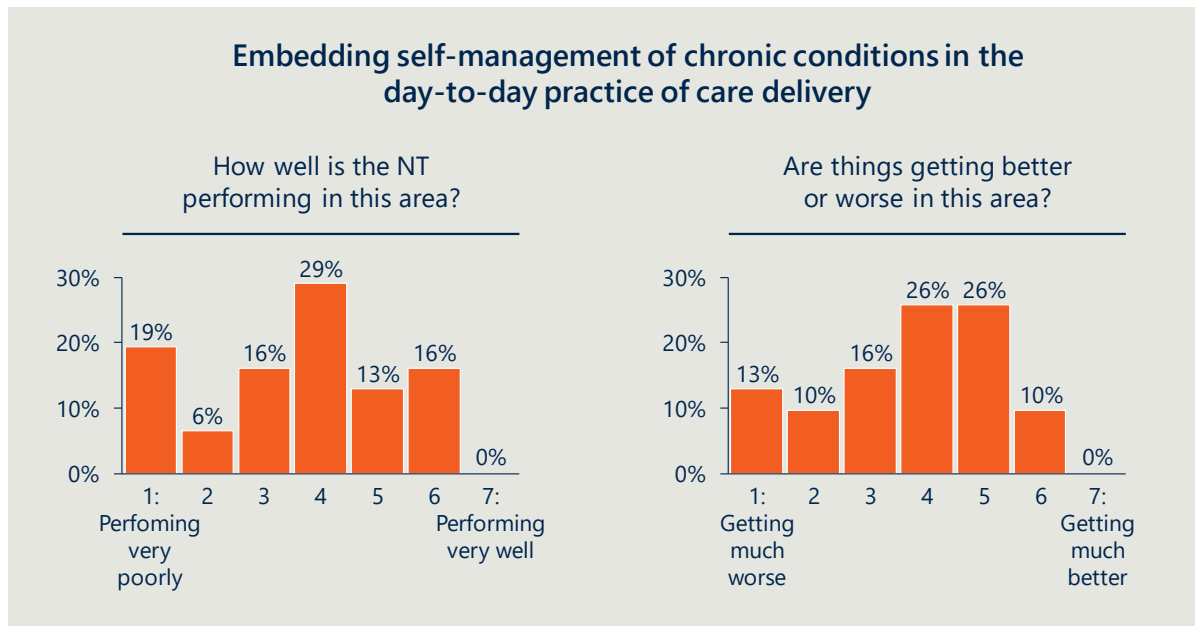
Quotes

“the strategy highlights the need for self-management, but this has not been translated across to implementation”

“Until we recognise and respect that our clients are the controllers of their care we will continue to provide care which never truly meets the needs of the client, family or community.”

Quantitative analysis

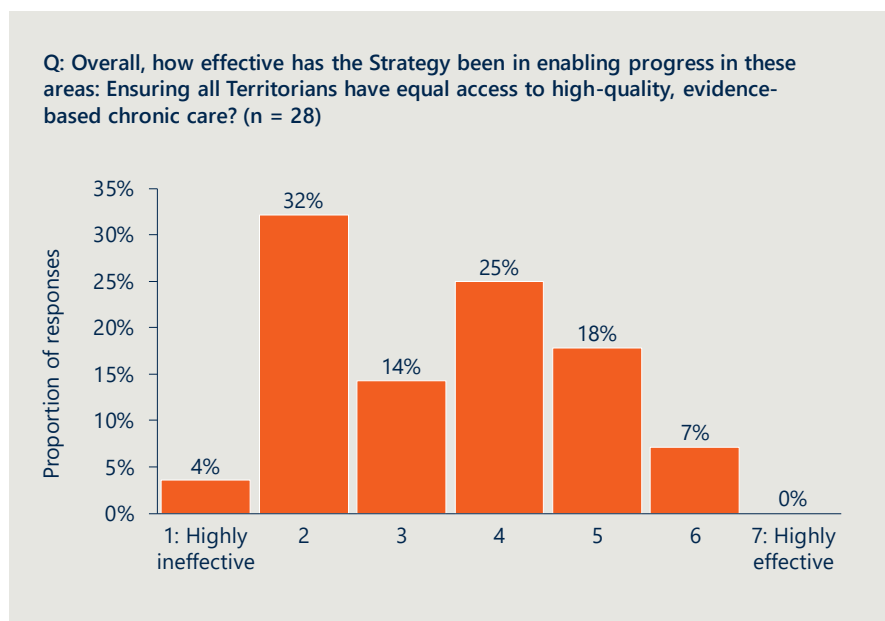
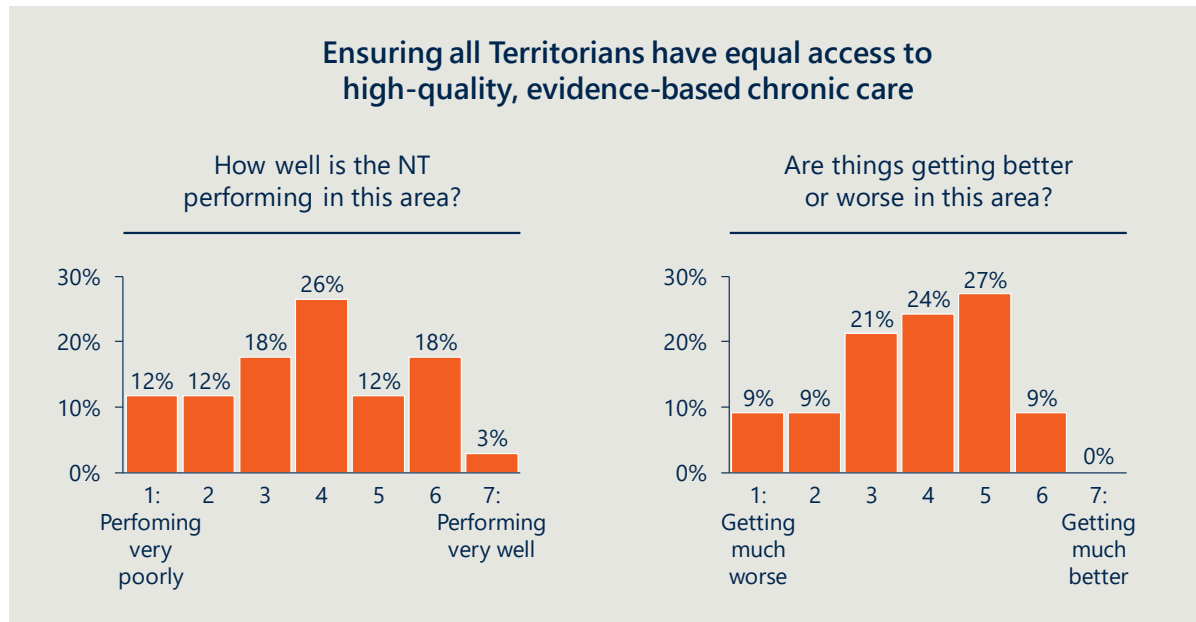
Figure 77 | Main survey results relating to Key Action Area 4



E.1.6 Key Action Area 5: Care for people with chronic conditions

Quantitative analysis

Figure 78 | Main survey results relating to Key Action Area 5



E.1.7 Key Action Area 6: Workforce planning and development

Themes

Attraction and retention of staff

- High staff turnover was regularly mentioned as a challenge by survey respondents, particularly in remote locations, creating issues for continuity of care, appropriate training and experience in chronic conditions, and local relationships in communities.

- Recruiting staff was also mentioned as a major challenge, taking too long with positions being left unfilled.
- Some survey respondents provided suggestions for how to increase staff retention, including higher salaries and incentives, permanent roles instead of short-term contracts, and offering more flexible and supportive work environments.

Staff skills and capacity

- Survey respondents mentioned the need for better training and skills in managing chronic conditions in the workforce. Suggestions included having dedicated teams for chronic conditions, or employing nurses with a background in chronic care (as opposed to acute care).
- Several respondents also cited workforce capacity as a limiting factor in providing appropriate services.
- Some respondents highlighted the importance of AHPs in managing chronic conditions and that they need to be more represented in the workforce.

Quotes

“High staff turnover is a major limitation to the provision of care required for management of chronic diseases. Especially in remote communities where the therapeutic relationship is so important.”

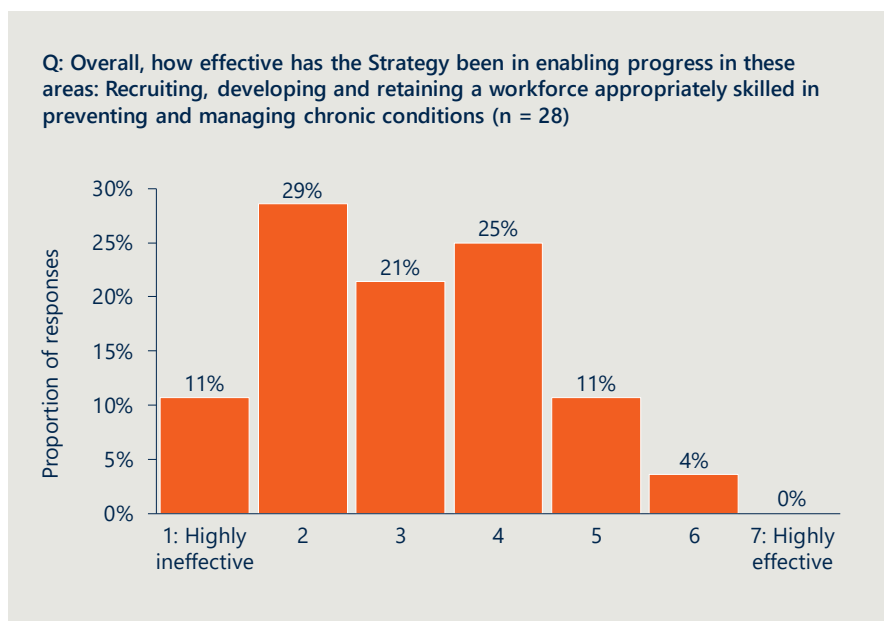
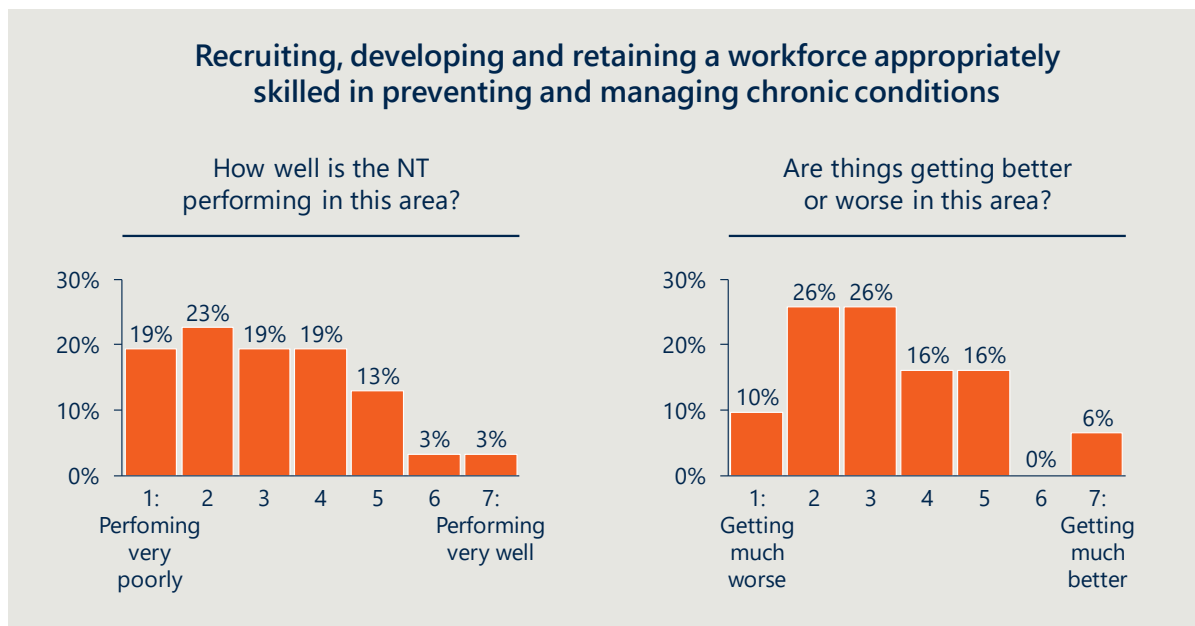
“we are seeing increasing turnover of staff across the Territory, it's difficult for staff to become trained to deliver effective chronic conditions management”

“I believe that there is a huge potential to decrease staff turnover should effective strategies be put in place.”

“AHP workforce has decreased and needs to be empowered to assist with risk factor education and reduction”

Quantitative analysis

Figure 79 | Main survey results relating to Key Action Area 6



E.1.8 Key Action Area 7: Information, communication and disease management systems

Themes

- Some respondents noted improvements in systems for sharing information and accessing data over the last ten years. There were examples given of technology playing a helpful role in managing clients, such as medical software with built-in chronic conditions management care.
- Others also stated that telehealth was improving services, for example through greater specialist involvement in care, though others suggested that its uptake could be improved.

- Many survey respondents mentioned difficulties in accessing information, for example needing to access information from multiple platforms which can be slow and laborious.

Quotes

“Probably the most useful technological advancement is the CC management care built into the medical software that basically lays out best practice into care plans automatically.”

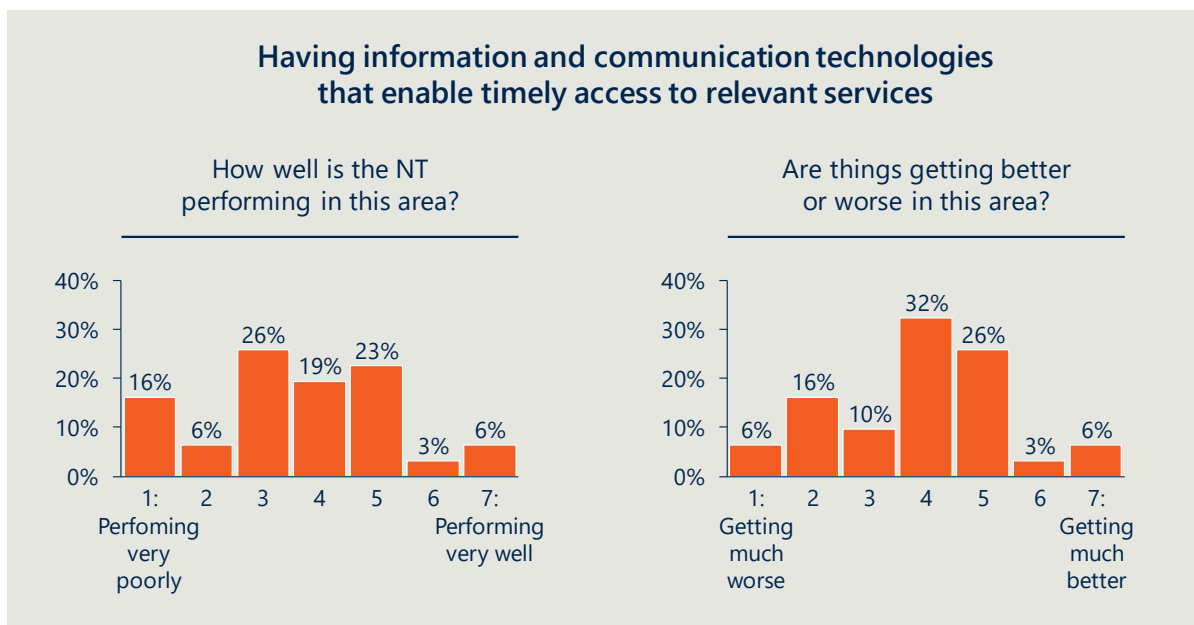
“No one electronic system for all to access so multiple duplication of services for one client”

“Electronic systems have become highly developed for managing chronic diseases. I'm not sure however that they are used to their full extent by health staff”

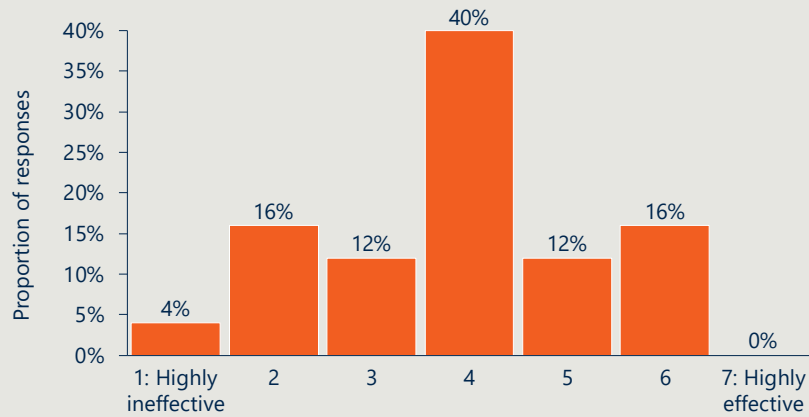
“Communication technology is constantly improving”

Quantitative analysis

Figure 80 | Main survey results relating to Key Action Area 7



Q: Overall, how effective has the Strategy been in enabling progress in these areas: Having information and communication technologies that enable timely access to relevant services? (n = 25)



E.1.9 Key Action Area 8: Continuous quality improvement

Themes

- CQI was not mentioned by many survey respondents, but those who did mention it did so positively, often stating that it has been widely established in services.

Quotes

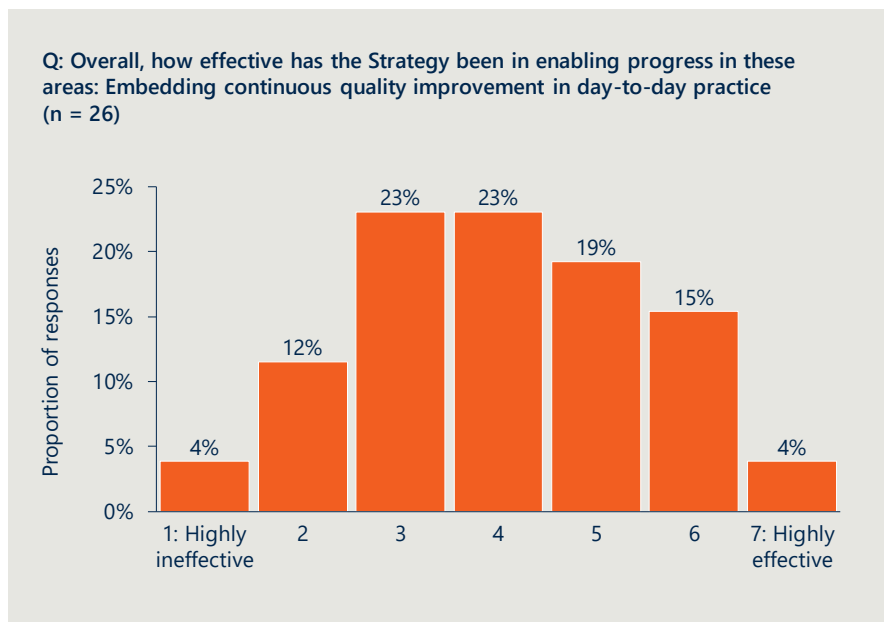
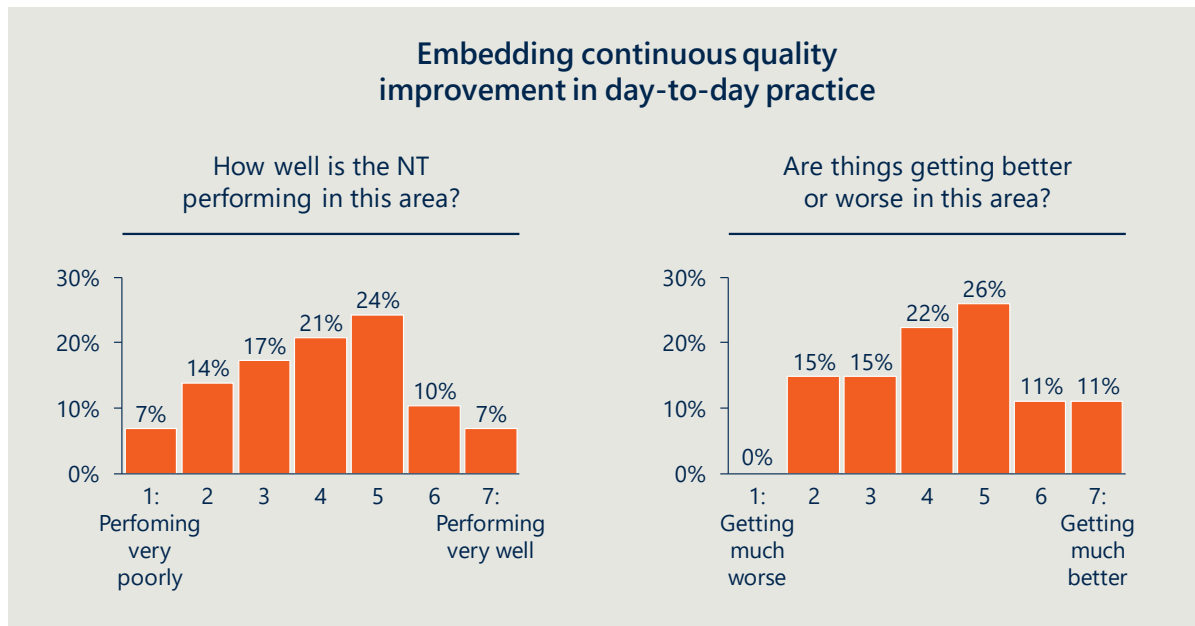
“CQI processes are happening across the NT in all areas affecting chronic conditions and there is a lot of good work occurring.”

“CQI has been embraced across all health services”

“CQI has improved; however, using CQI data for planning is still a challenge for many.”

Quantitative analysis

Figure 81 | Main survey results relating to Key Action Area 8



E.1.10 Enablers to preventing and managing chronic conditions

Themes

- Social determinants of health were listed most often as enablers to prevent and manage chronic conditions. Housing was mentioned most often, along with employment, economic engagement and food security.
- Primary prevention and addressing risk factors was another common enabler, including access to a healthy lifestyle, actions to reduce alcohol and tobacco consumption, and more health promotion and outreach.

- Workforce was a major enabler listed, including themes around staff attraction and retention, having the right skills to deal with chronic conditions (including multidisciplinary skills), and bringing more local Aboriginal staff into the health workforce.
- Better partnerships, planning and coordination were commonly cited enablers, including building relationships and overcoming silos. This included going beyond the health sector to housing, justice, education and many others to address the social determinants more effectively.
- Other enablers listed included more funding for services, better access to care, improved early intervention, and more in-language services and involvement of Aboriginal communities and organisations in running health services.
- Information technology and systems were not mentioned often as enablers. Specific mentions included My eHealth Record, care plans in electronic systems, and a single Hospital Registration Number for clients across the NT.

Quotes

“the different stakeholders need to all come together and develop and plan as to how best to manage chronic conditions”

E.1.11 Barriers to preventing and managing chronic conditions

Themes

- Inadequate resourcing and funding was listed as a major barrier. This included not having enough funded services or staff positions, but also included poorly designed and short-term funding.
- Workforce challenges were another major barrier, mostly around high turnover but also around limits in staff skills and training to manage chronic conditions.
- Social determinants were listed often as a barrier.
- Lack of resources in language and interpreters to provide translation was listed as a barrier.
- Other barriers mentioned included not enough relationships and collaboration, not enough systems for sharing information and coordinating, and the tendency to focus on acute instead of chronic care.

Quotes

“The barriers to preventing chronic conditions is to first tackle the social determinants of health before we can start improving the health of our Indigenous populations.”

“There needs to be a focus on resources and appropriate resources in language for all Territorians.”

E.1.12 Progress in addressing chronic conditions, and how the Strategy contributed to this

Themes

- Many survey respondents thought that not enough is being done or that the impact is not being seen in improved outcomes.

- Many respondents said they were not sure whether the Strategy had an impact, or that it had not helped much or at all.
- Some survey respondents mentioned the value of the Strategy in raising awareness, enabling partnerships, setting strategic direction and guiding policy and planning. However, some of these doubted whether it had created enough impact on the ground to improve outcomes.

Quotes

“[The strategy] highlights what needs to be done but it still needs to happen on the ground”
 “most staff I work with wouldn't be aware of strategy”

E.1.13 Future areas of focus for preventing and managing chronic conditions

Themes

- Suggestions for future areas of focus included prevention, education, health literacy and addressing social determinants.
- Many also included lifting workforce performance, through attracting and retaining staff, having a more skilled and multidisciplinary workforce, and involving more local Aboriginal people as staff.
- System-level factors included encouraging stronger relationships between health providers and other non-health sectors.
- Several survey respondents suggested the next strategy should have funding attached, with some suggesting this fund activities at the local level and grassroots initiatives.

Quotes

“leverage international attention and desire to improve the health of first nation people to attract quality facilitators of health outcomes”
 “It is a dense & complex document with noble intentions - but has over-reached”
 “Continued attention, resourcing and momentum in this area is vital.”

E.2 Validation survey results

Nous ran a survey to validate the themes of the stakeholder consultations conducted in February 2020, including the focus groups, interviews and survey.²⁷⁰ This section presents the results of the survey, including:

- the distribution of respondents' answers to each quantitative question
- the themes from their answers to qualitative questions
- how Nous proposes to incorporate this feedback.

²⁷⁰ As stated in the introduction to the survey, Nous and the Department initially intended to test the themes from the consultations through workshops in Darwin and Alice Springs, but this was no longer feasible due to the coronavirus pandemic.

The analysis of the survey included 23 responses in total. Nous and the Department initially intended to test the themes from the consultations through face-to-face workshops in Darwin and Alice Springs. Due to the coronavirus pandemic, this was infeasible. The pandemic environment may also account for the limited number of responses received.

The primary usefulness of the survey results is in identifying improvements to the themes. They do not in themselves confirm or disconfirm the themes, as the number of responses was small compared to the number of people who participated in the stakeholder consultations, particularly in the Barkly, East Arnhem and Katherine regions.

Due to the small number of responses to qualitative questions, the analysis of these questions explicitly states how many respondents made each statement (for example, "Three respondents stated that..."). This method of reporting is useful to identify improvements to the themes, however it is not treated as definitive (i.e. they don't tell us whether we got the themes "right" or "wrong").

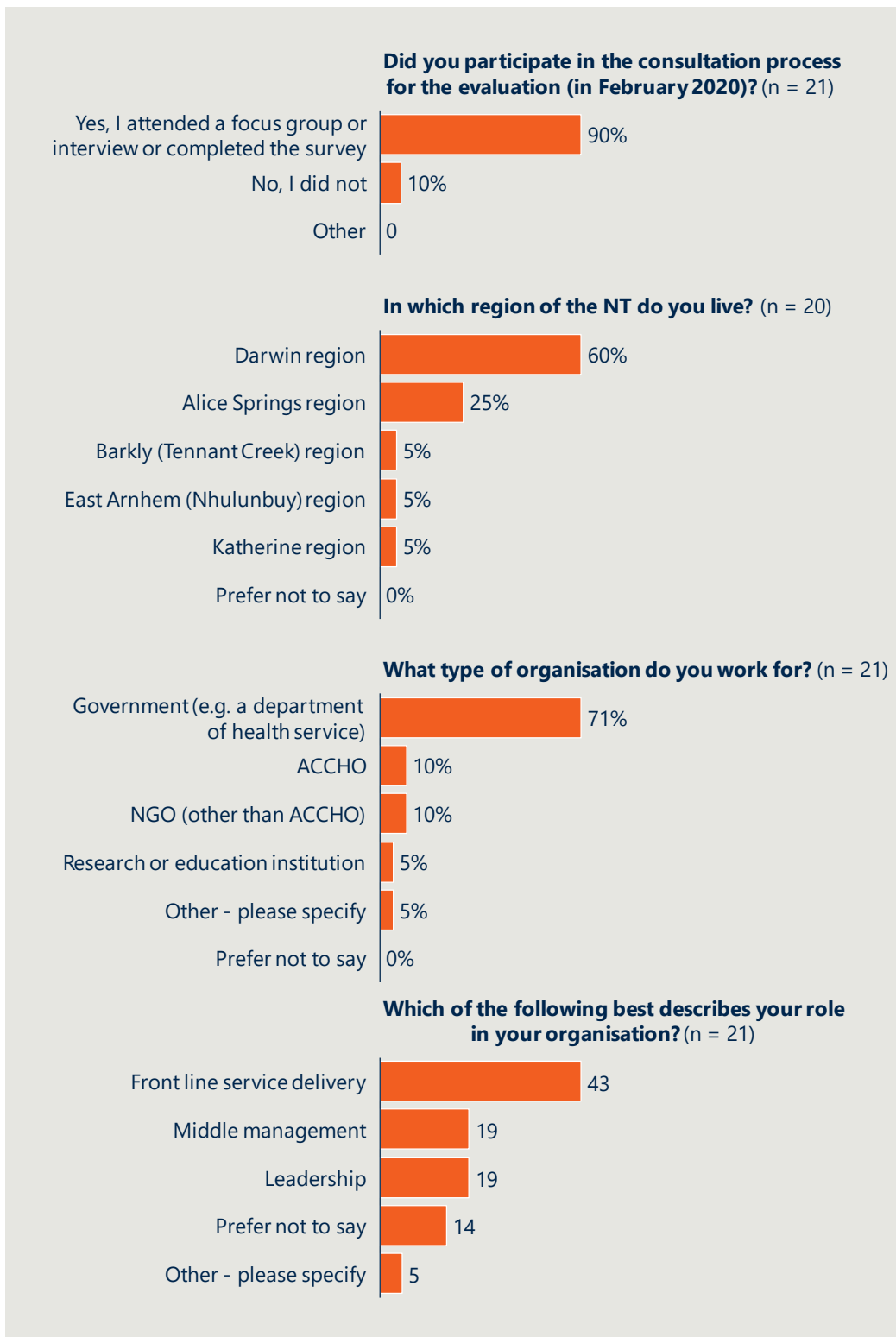
E.2.1 Profile of survey respondents

The survey was circulated to people who registered to participate in the stakeholder consultations conducted in February 2020 and/or who accepted a calendar invitation for a focus group or interview. It was not possible to circulate the survey to all focus group participants, as people were encouraged to show up to these sessions even if they had not registered, and they were not required to provide contact details. Similarly, it was not possible to circulate the survey to all respondents to the previous survey, as the previous survey was anonymous.

21 respondents fully completed the survey, in the sense that they clicked through all its sections and submitted it, though few answered all questions. A further six respondents partially completed the survey. Of these, two were included in the analysis, because it was possible to confirm with reasonable confidence that they did not later fully complete the survey. (In particular, their responses to qualitative questions did not closely resemble those in any of the full completions.) As a result, the number of respondents to each question ranged from 23 (for several quantitative questions) to four (for a qualitative question).

Figure 82 below provides an overview of respondents.

Figure 82 | Profile of validation survey respondents



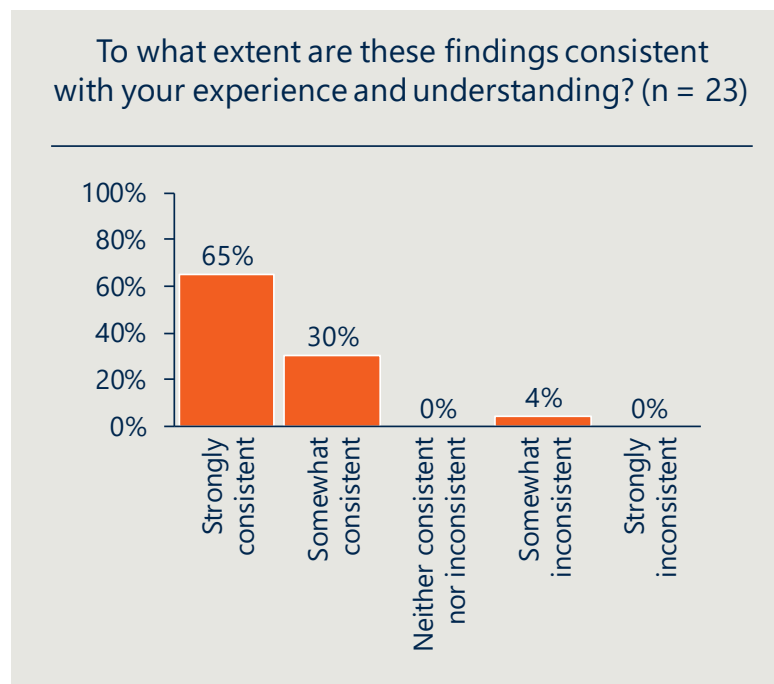
The profile of validation survey respondents is fairly similar to the profile of the main consultation survey respondents, of which 35 participated. In the main survey, 71 per cent of respondents resided within the Darwin area, as opposed to 60 per cent in the validation survey. Respondents in both surveys mostly worked in the NT Government. The distribution of roles by level was also similar for respondents in both surveys.

E.2.2 Key Action Area 1: Social Determinants

Quantitative feedback

Nearly all of the 23 respondents agree that the findings relating to social determinants of health are consistent with their experience and understanding. Only one participant believed the findings to be somewhat inconsistent with their experience.

Figure 83 | Quantitative results from validation survey regarding Key Action Area 1²⁷¹



Qualitative feedback from respondents who responded “strongly consistent” or “somewhat consistent”

Respondents emphasised their agreement with various themes, including:

- The need for greater collaboration to address social determinants (for example, between government agencies and between organisations involved in service delivery) (three respondents)
- The lack of improvement in social determinants themselves (for example, education and employment) (two respondents)
- The improvement in awareness of social determinants (one respondent).

One respondent stated the NT response to COVID-19 supports these findings.

One respondent emphasised the need for a more proactive, less reactive approach to social determinants.

One respondent noted the NT Health Aboriginal Cultural Security Framework provides guidance in embedding cultural security in communication and engagement with health consumers.

One respondent noted the Stronger Futures in the NT Act 2012 involved collaboration in regard to food security (for example, a school nutrition program for remote communities and a review of nutrition guidelines).

²⁷¹ Responses of “don’t know / can’t choose” were excluded from the analysis.

One respondent stated the themes regarding health literacy are consistent with health strategies targeting Aboriginal and Torres Strait Islander people.

One respondent stated that, while there has been an increase in the supply of housing in some remote communities, there is a continuing need for more housing.

Qualitative feedback from respondents who responded otherwise

One respondent stated the increase in health checks may not increase access to health services (e.g. due to lack of specialists).

Changes Nous proposes to make to the report based on these results

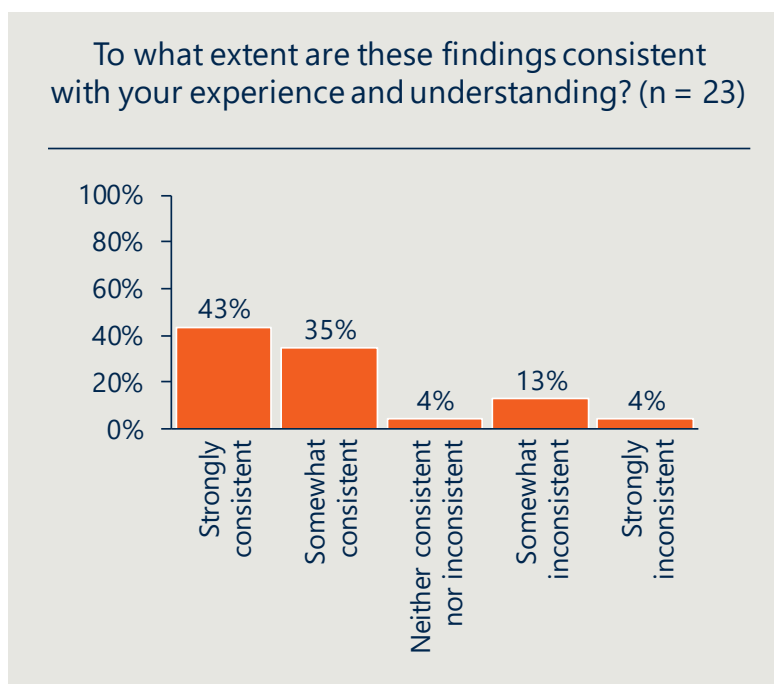
- Add reference to NT Health Aboriginal Cultural Security Framework, as an example of progress in relation to health literacy.
- Add reference to Stronger Futures in the NT Act 2012, as an example of intersectoral collaboration.

E.2.3 Key Action Area 2: Primary Prevention to Prevent Risk Factors

Quantitative feedback

Eighteen of the 23 respondents believe that the findings relating to primary prevention and risk factors are consistent with their experience and understanding. Four respondents believed there was inconsistency with the findings, however only 1 respondent strongly challenged the findings.

Figure 84 | Quantitative results from validation survey regarding Key Action Area 2



Qualitative feedback from respondents who responded “strongly consistent” or “somewhat consistent”

Respondents emphasised their agreement with various themes, including:

- Food security being a continuing challenge (two respondents)

- The limited reduction in smoking rates in remote communities (two respondents)
- The reduction in alcohol consumption due to supply reduction measures (one respondent)
- The investment in exercise infrastructure in Darwin and the lack of it in remote communities (one respondent).

In regard to smoking:

- One respondent noted that remote communities are not "set up" to support cessation (for example, due to a lack of staff and resources).
- One respondent attributed declines in smoking rates to taxation and education.

In regard to food security:

- One respondent noted that the findings are consistent with the NT Market Basket Survey and the Healthy Kids Under 5 Program Growth and Nutrition Reports.
- One respondent noted that healthy food is often not available in remote communities (for example, because shops believe it doesn't sell).
- One respondent noted that it is difficult to change food preferences even when healthy food is available at an affordable price.

In regard to the role of schools in teaching students about nutrition and exercise:

- One respondent noted that this role while important is limited by poor attendance and the restricted influence children have on their food choices.
- One respondent highlighted a need for more health education in schools, with the health sector developing content and assisting to deliver it (as teachers lack the time and resources to do this).

One participant noted that marijuana consumption is a problem in remote communities.

One respondent emphasised the importance of health promotion.

Qualitative feedback from respondents who responded otherwise

Two respondents challenged the assertion that unhealthy food is more affordable, with one citing the NT Market Basket Survey as evidence. They instead attributed food preferences and behaviours to low incomes, high overall costs, a lack of food preparation facilities and transportation and "complex other social and cultural factors".

One respondent stated that overall alcohol consumption is a poor measure of the effectiveness of alcohol prevention measures, with better measures including alcohol related violence, hospital admissions and binge drinking.

One respondent again noted the Stronger Futures in the NT Act 2012 involved collaboration in regard to food security (for example, a school nutrition program for remote communities and a review of nutrition guidelines).

Changes Nous proposes to make to the report based on these results

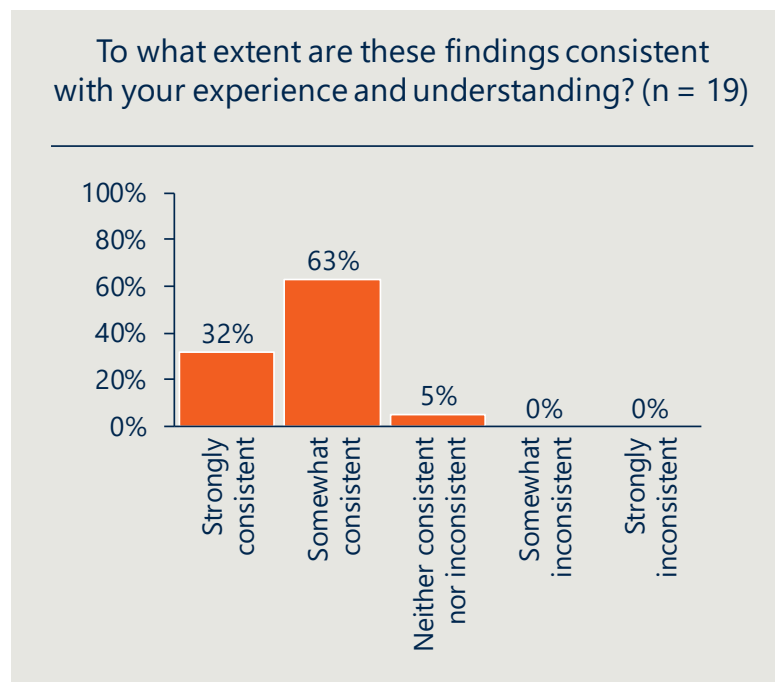
- Add reference to NT Market Basket Survey, to demonstrate that stakeholders' views about the relative prices of health and unhealthy foods may be inaccurate.
- Add reference to Stronger Futures in the NT Act 2012, as an example of progress in relation to food security.

E.2.4 Key Action Area 3: Early Detection and Secondary Prevention

Quantitative feedback

Twelve of the 19 respondents believe the findings are somewhat consistent with their experience and understanding of early detection and secondary prevention. No respondents disagree with the findings for this Key Action Area.

Figure 85 | Quantitative results from validation survey regarding Key Action Area 3



Qualitative feedback from respondents who responded “strongly consistent” or “somewhat consistent”

Regarding health checks:

- One respondent said health checks provide an opportunity for Aboriginal Health Practitioners to engage with consumers about health issues.
- One respondent said health checks only translate to improved health outcomes if consumers are engaged in their health care.
- One respondent said that health checks are only done when there is adequate staffing. Agency staff working in outreach programs sometimes do not see the need for undertaking health checks.

One respondent stated that monitoring and reporting enables service providers to assess their performance against service delivery agreements.

One respondent said the themes needed more detail about secondary prevention.

One respondent agreed that screening is done well.

Qualitative feedback from respondents who responded otherwise

One respondent noted that increases in the number of health checks and care plans may be due to improvements in systems that support MBS claiming (for example, PCIS).

One respondent said population screening for mental disorder within primary health care is difficult and cumbersome, with a high number of false positives and insufficient staff to treat identified cases.

Changes Nous proposes to make to the report based on these results

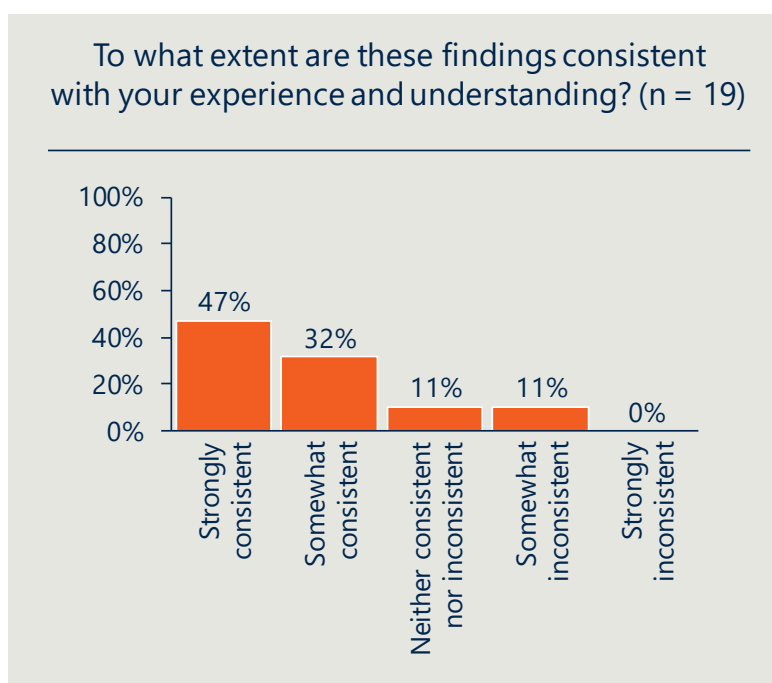
- None, as each point was a subjective statement raised by only a single respondent.

E.2.5 Key Action Area 4: Self-management

Quantitative feedback

There was a broad range of responses to whether findings on self-management are consistent with stakeholders' experiences. Fifteen of the 19 respondents agreed that findings are consistent, with 2 respondents having a neutral opinion on the relevance of findings, and 2 respondents disagreeing with the consistency of findings.

Figure 86 | Quantitative results from validation survey regarding Key Action Area 4



Qualitative feedback from respondents who responded “strongly consistent” or “somewhat consistent”

Respondents identified various barriers to self-management, including:

- low staff capability in self-management (one respondent)
- the time, support and consistent messaging it requires (one respondent)
- lack of recognition of Aboriginal and Torres Strait Islander Australians as the first peoples of Australia (one respondent)
- high staff turnover (one respondent).

Two respondents said it should be compulsory for health professionals to support clients to self-manage.

One respondent emphasised that strong, long-term relationships between services and consumers are a key enabler for self-management, and that enablers for such relationships include increased staff retention and representation of Aboriginal people in the health workforce.

Qualitative feedback from respondents who responded otherwise

One respondent said self-management is essential to patient-centred care, found it concerning that it was not widely considered a core part of health professionals' practice, and questioned whether this could be due to a large number of primary health care staff having acute backgrounds.

One respondent said self-management is difficult because large numbers of consumers have low literacy and limited understanding of their conditions and how they got them.

Changes Nous proposes to make to the report based on these results

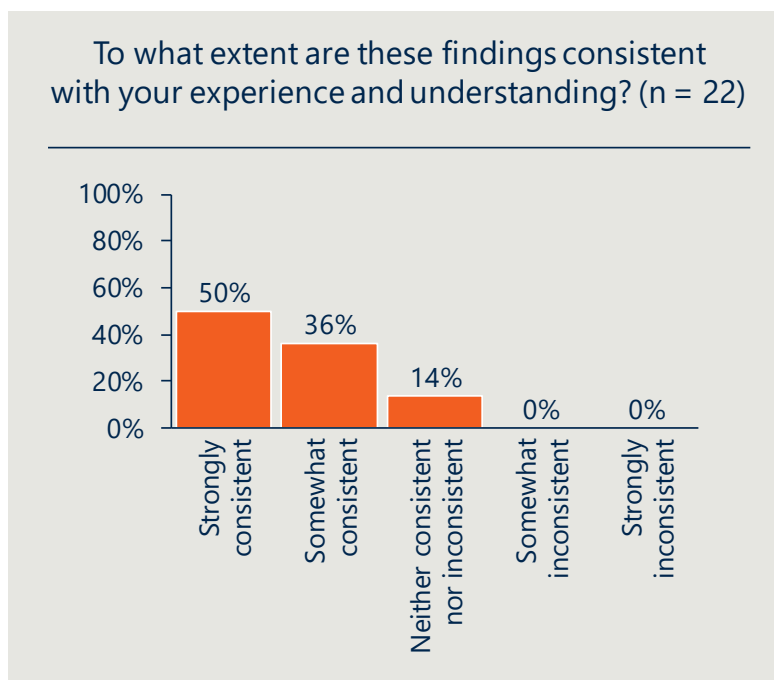
- Note that respondents identified enablers and barriers to self-management that were broadly consistent with those listed in the report.
- Note that several respondents suggested self-management is "essential" and/or that it should be compulsory for health professionals to support it.

E.2.6 Key Action Area 5: Care for People with Chronic Conditions

Quantitative feedback

Half of all respondents believe that the findings for Key Action Area 5 are strongly consistent with their experience and understanding. Only 3 respondents had a neutral view of the findings, and no respondents disagreed with the findings.

Figure 87 | Quantitative results from validation survey regarding Key Action Area 5



Qualitative feedback from respondents who responded “strongly consistent” or “somewhat consistent”

Three respondents agreed there are ongoing difficulties in achieving integrated, coordinated care. One noted the difficulty in achieving this for patients with multiple conditions and specialists. One emphasised the issue of siloes within the NT Government health system.

Two respondents agreed that care plans do not always lead to consumers with chronic conditions receiving best practice care and/or experiencing improved health outcomes.

Two respondents stated that telehealth has improved access to care (for example, to specialists in remote areas). One noted it can be challenging for clinics to coordinate.

One respondent said more care coordinators are needed to support clients with their care plans.

One respondent said barriers to care for people with chronic conditions include high turnover of staff, use of different data systems in remote and urban areas, and clients not understanding the long-term impact of their condition.

Qualitative feedback from respondents who responded otherwise

One respondent agreed there has been a strong focus on increasing MBS revenues from care plans.

One respondent suggested PCIS may have improved care coordination and reduced duplication in the follow up of care plans with transient populations.

Changes Nous proposes to make to the report based on these results

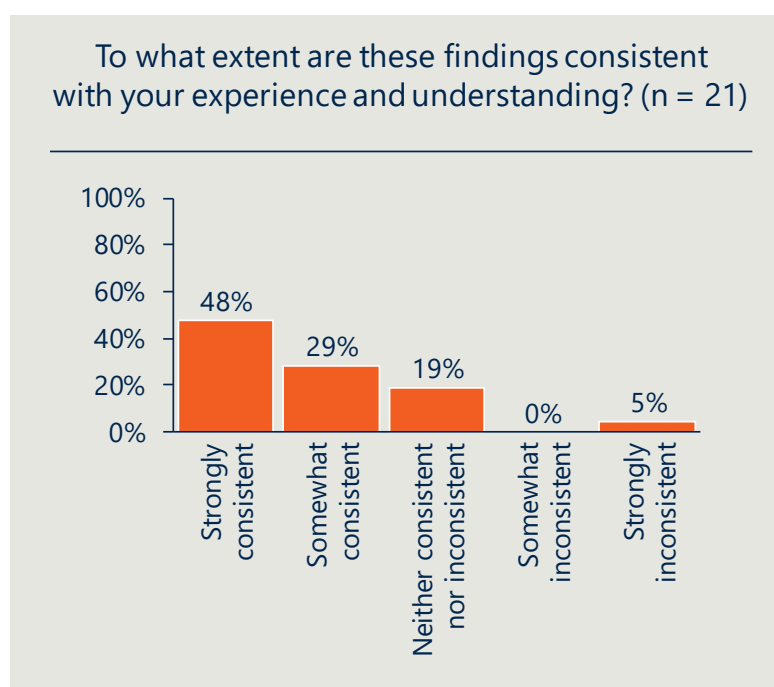
- None, as many points raised were consistent with the content already included in the report, and most were subjective statements raised by only a single respondent.

E.2.7 Key Action Area 6: Workforce Planning and Development

Quantitative feedback

Respondents are more varied in their beliefs of the accuracy of findings against Key Action Area 6. Seventeen of the 21 respondents agree that findings are strongly or somewhat consistent, with 4 respondents taking a neutral approach on the relevance of the findings to their context.

Figure 88 | Quantitative results from validation survey regarding Key Action Area 6



Qualitative feedback from respondents who responded “strongly consistent” or “somewhat consistent”

Much of the feedback for this key action area focused on AHPs, with five respondents echoing concern about decreasing numbers of AHPs.

In relation to AHPs, respondents also suggested that:

- AHPs are key personnel in dealing with chronic conditions (one respondent).
- The number of AHP trainees has improved in government-run health services but potentially not in others (one respondent).
- A lack of housing limits opportunities for urban-based AHP students to complete placements in remote communities (one respondent).
- There is a growing cohort of younger, more literate people entering the AHP profession (one respondent).
- Rotating nursing staff get insufficient support to develop AHPs to their full capacity (one respondent).
- There has been a decrease in the confidence and skills of new AHPs (one respondent).

Three respondents said that, in addition to an increase in the representation of Aboriginal people in the health workforce overall, there needs to be an increase in the representation of Aboriginal people in particular positions (for example, doctors, nurses, other clinicians, managers).

Three respondents agreed that retention of skilled workers is still challenging. One respondent further argued that there has been insufficient effort to address this by changing the way remote staff are recruited and managed; for example, investing in job sharing and combining this with longer contracts, thereby enabling workers to build relationships in communities while also getting adequate breaks.

Qualitative feedback from respondents who responded otherwise

One respondent disagreed there has been improvement in employment of a workforce appropriately skilled in chronic conditions prevention and management, suggesting the lack of improvement in this area is evident in a lack of change in outcomes.

The respondent also suggested skilled staff are not employed in the right areas; for example, there have reportedly been increases in the number of Preventable Chronic Conditions Educations but not in the number of front line staff health professionals.

The respondent also attributed decreasing numbers of AHPs to declining education standards, including at the primary and secondary levels.

One respondent recommended an article about workforce planning and development.

Changes Nous proposes to make to the report based on these results

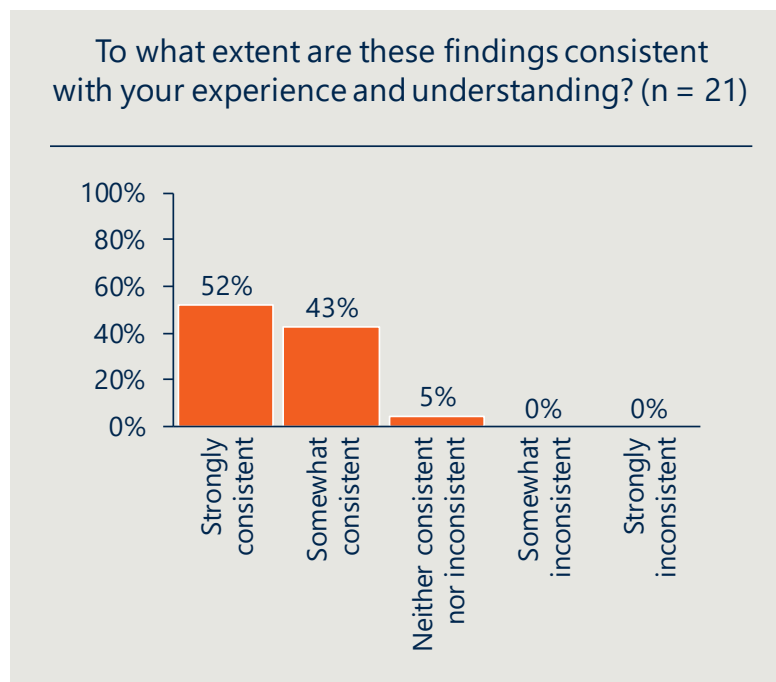
- Note that several respondents echoed concern about decreasing numbers of AHPs
- Note the point several respondents made about the need to increase representation of Aboriginal people in particular positions
- Note that several respondents agreed staff retention is still challenging.
- Review article about workforce planning and development.

E.2.8 Key Action Area 7: Information, Communication and Disease Management Systems

Quantitative feedback

All but one of the respondents believe the findings are strongly or somewhat consistent with their experience and understanding. Only one respondent took a neutral approach to the question, and no respondents disagreed with the findings.

Figure 89 | Quantitative results from validation survey regarding Key Action Area 7



Qualitative feedback from respondents who responded “strongly consistent” or “somewhat consistent”

Two respondents agreed that technology has improved, with one specifically commenting this has in turn improved access to chronic conditions prevention and management services.

Two respondents commented on the themes about telehealth, one stating there are still significant barriers to the provision of telehealth within the NT Government system, and the other stating the additional staff required to deliver telehealth may negate any financial savings it generates.

One respondent said linked data (for example, the NT-SA Data Linkage Project) has improved chronic conditions prevention and management by enabling better research.

One respondent said the CARPA manual is the “bible” of care and forms the basis of education for AHP trainees.

One respondent said the existence of a Territory-wide document system represents good progress.

Qualitative feedback from respondents who responded otherwise

No respondents who responded otherwise provided qualitative feedback.

Changes Nous proposes to make to the report based on these results

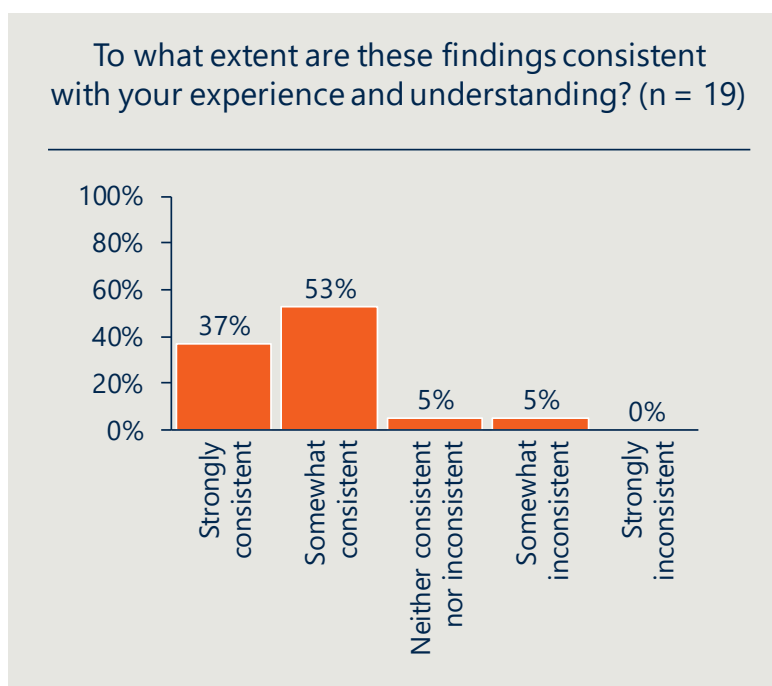
- Add reference to NT-SA Data Linkage Project

E.2.9 Key Action Area 8: Continuous Quality Improvement

Quantitative feedback

Seventeen of the 19 respondents believe that the findings are consistent with their experience and understanding – of these, 10 respondents agree that findings are only somewhat consistent.

Figure 90 | Quantitative results from validation survey regarding Key Action Area 8



Qualitative feedback from respondents who responded “strongly consistent” or “somewhat consistent”

One respondent agreed that having established positions and programs has supported CQI.

One respondent said health professionals provide better care the greater their understanding of CQI.

One respondent suggested CQI has had a strong clinical focus (for example, improving KPIs and increasing the number of health checks) and too little preventive focus.

Qualitative feedback from respondents who responded otherwise

One respondent suggested the cessation of Commonwealth Government funding for CQI has lessened support for and use of CQI across the NT.

Changes Nous proposes to make to the report based on these results

- Add reference to cessation of [Commonwealth Government funding](#) for CQI.

E.2.10 The Impact of the Strategy

Quantitative feedback

There was a wide variety of responses to the findings regarding impact of the Strategy. The majority of respondents (9 out of 19) thought the findings were somewhat consistent, however three people believe that the findings are inconsistent with their experience and understanding.

Figure 91 | Quantitative results from validation survey regarding the impact of the Strategy



Qualitative feedback from respondents who responded “strongly consistent” or “somewhat consistent”

One respondent reported seeing no evidence of stakeholders:

- continually realigning their investments to progress the Strategy
- willingly and actively participating in developing, monitoring and reporting on the Strategy implementation plans.

One respondent agreed there is a lack of clarity about the role of non-government stakeholders' in the Strategy and, specifically whether the Strategy is meant to be used across the government and non-government sectors or only in the government sector.

Qualitative feedback from respondents who responded otherwise

Three respondents said many people are unaware of the Strategy or do not use it. One of these respondents stated senior leaders use the Strategy to guide work.

One respondent from the government sector suggested non-government stakeholders aiming to improve consumer choice and reduce risk factors have a key role in influencing and acting on Strategy design to address local need.

One respondent criticised the fact that an evaluation framework with built-in indicators was not developed alongside the Strategy.

Changes Nous proposes to make to the report based on these results

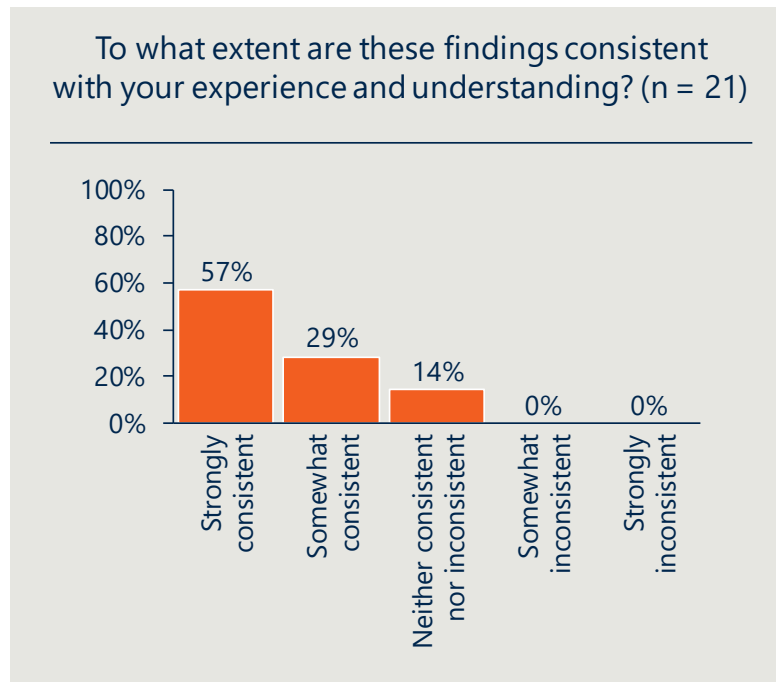
- Note that there was a relatively high proportion of responses other than “strongly consistent” or “somewhat consistent”, and that the most common justification for this was the supposedly low awareness of the Strategy.

E.2.11 Enablers and Barriers for Improvement in Chronic Conditions Prevention and Management

Quantitative feedback

Eighteen of the 21 respondents agree that findings on the enablers and barriers are strongly or somewhat consistent with their experience and understanding. The other 3 respondents took a neutral approach – neither agreeing or disagreeing with the findings.

Figure 92 | Quantitative results from validation survey regarding enablers and barriers for improvement in chronic conditions prevention and management



Qualitative feedback from respondents who responded “strongly consistent” or “somewhat consistent”

One respondent suggested the concept of "culturally appropriate services" should be further broken down.

One respondent suggested an additional barrier is insufficient focus on prevention (relative to clinical outcomes).

One respondent said AHPs are the most important link between health services and Aboriginal populations in remote communities.

One respondent suggested there is already sufficient workforce capacity, but that siloes prevent sharing of this capacity, which makes it seem limited.

One respondent said use of interpreters can be difficult in remote settings (for example, because appointments are not necessarily scheduled), and that health professionals should receive training in the languages of the communities they will be working in or visiting. This respondent also suggested that improving cultural appropriateness requires more than just incorporating Aboriginal languages into a Western model of health care, and that remote community leaders should be more involved in decisions about how health services are operated and accessed

Qualitative feedback from respondents who responded otherwise

One respondent said Australian Government funding directions are a strong influence on the NT.

Changes Nous proposes to make to the report based on these results

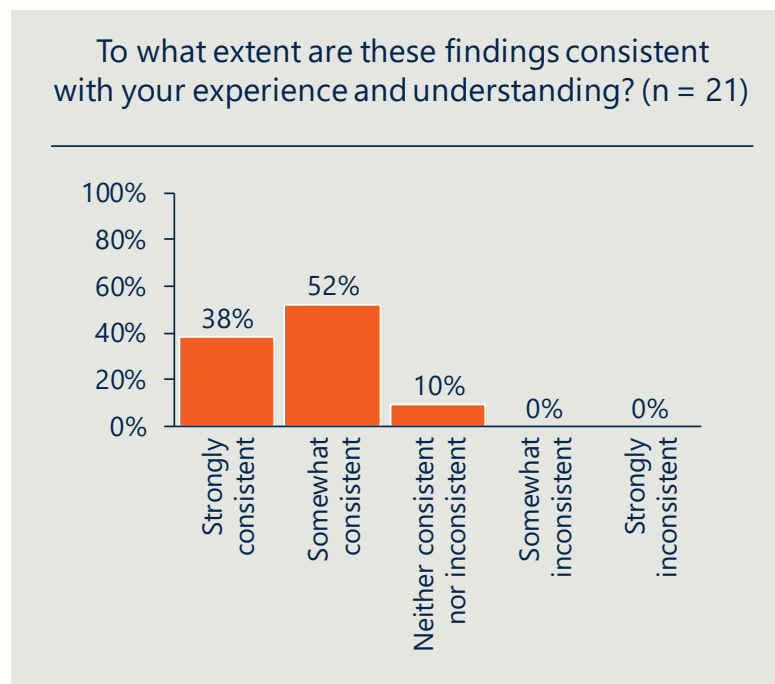
- Add section summarising other enables and barriers that were cited in stakeholder consultations, with a focus on those that seem particularly significant (for example, Australian Government funding directions).

E.2.12 The next strategy

Quantitative feedback

Just over half of the 21 respondents believe that the recommendations for the next strategy are somewhat consistent with their understanding. There is generally positive sentiment for the findings for the next strategy based on the validation survey.

Figure 93 | Quantitative results from validation survey regarding the next strategy



Qualitative feedback from respondents who responded “strongly consistent” or “somewhat consistent”

Respondents said the next strategy should :

- include the impact of climate change on chronic condition incidence, prevention and management (one respondent)
- support integration of services (one respondent)
- be jointly developed by the health and non-health sectors (one respondent)
- have "someone driving it" and that staff on the ground should report against it and be informed of its progress (one respondent).

One respondent said the themes about the next strategy (for example, the need for clear priorities, actions and stakeholder responsibilities) are difficult to achieve in practice.

One respondent agreed with the need for a whole-of-government strategy to address social determinants of health.

Qualitative feedback from respondents who responded otherwise

No respondents who responded otherwise provided qualitative feedback.

Changes Nous proposes to make to the report based on these results

- None, as many points raised were consistent with the content already included in the report, and all were raised by only a single respondent.
- None, as many points raised were consistent with the content already included in the report, and all were raised by only a single respondent.