



Strengthening Spirit and Culture

A cost-benefit analysis of Dardi Munwurro's
men's healing programs

Deloitte.

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The Healing Foundation is a national Aboriginal and Torres Strait Islander organisation that provides a platform to amplify the voices and lived experience of Stolen Generations survivors and their families.

We work with communities to create a place of safety, providing an environment for Stolen Generations survivors and their families to speak for themselves, tell their own stories, and be in charge of their own healing.

We promote trauma-aware, healing-informed practice to help government, policymakers, and workforces understand their role in intergenerational healing.

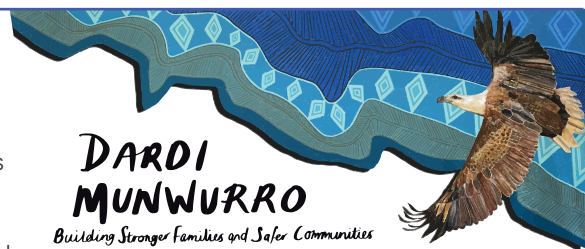
By addressing unresolved trauma in First Nations communities – trauma that was caused by colonisation and actions like the forced removal of children – we are walking alongside communities on the path to healing.

We are governed by a First Nations Board and Executive and guided in our work by our Stolen Generations and Youth Reference Groups.

Our work honours our First Nations ancestors to ensure future generations continue to thrive for the next 60,000 years.

Dardi Munwurro (Strong Spirit) is a specialist Aboriginal healing and family violence prevention service.

Dardi's vision is to build stronger families and safer communities by breaking the cycle of intergenerational trauma in Aboriginal families and communities and by empowering and inspiring individuals to heal the past, acknowledge the present, and create a positive vision for the future.



Since establishment in 2000, Dardi Munwurro has grown to be a statewide family violence prevention service with more than 30 staff having supported more than 1,000 clients in recent years.

Dardi is the only Aboriginal organisation in Australia that provides access to Aboriginal Men's Healing and Behaviour Change programs across a state or territory, with programs operating across numerous sites in Victoria.

While focused on supporting men to understand trauma and address behaviours that are symptomatic of trauma (including substance misuse, violence, anger, homelessness, and welfare dependence), Dardi's men's programs focus on men being accountable as proud, responsible, and respectful men, fathers, partners, uncles, brothers, and grandfathers.

We also have a Family Safety and Engagement team, who support safety for women and children impacted by violence; programs for younger males in contact with Youth Justice; and programs for men in Correctional centres.

In 2020 we launched *Brother to Brother*, Australia's first 24/7 Aboriginal men's counselling and crisis support line.

Dardi's work draws from the strength and wisdom of Elders and focuses on connecting Aboriginal people with culture and kinship, strengthening their identity and self-worth, and nurturing an understanding of and commitment to core cultural responsibilities, which include respecting women and caring for families.

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Glossary

Acronym	Full name
BCR	Benefit-cost ratio
CCO	Community Correction Order
MHBC	Men's Healing & Behaviour Change
NJP	Ngarra Jarranounith Place



Message from the Director

Dardi Munwurro



I am proud to introduce the cost-benefit analysis of Dardi Munwurro's men's and young men's healing programs prepared by Deloitte Access Economic on behalf of The Healing Foundation.

Dardi Munwurro is a genuine grassroots Aboriginal community organisation that started more than two decades ago, in recognition of the need to reinstate a space where Aboriginal men could come together to share our stories, support one another, and benefit from the guidance and wisdom of our Elders. It is an example of genuine self-determination, built from the ground up and attracting support from community, government, and other partners once we got runs on the board.

Dardi now offers access to support for Aboriginal men's healing and behaviour change at numerous locations across the state, has established the Bramung Jaarn ('Youth Journeys') program for younger males and has a Family Safety team to support women and children impacted by family violence. To my knowledge, our residential men's healing program Ngarra Jarranounith Place ('Men's Healing Place' in Woi Wurung language), is the first Indigenous men's residential family violence healing program in the world.

We felt humbled when we were approached by The Healing Foundation, who support Aboriginal and Torres Strait Islander healing at a national level, and asked to participate in a study led by Deloitte to consider the economic impacts of Aboriginal men's healing.

This invitation and the process of engaging with Deloitte and The Healing Foundation helped us to reflect on our practice, process the benefits of our work, and consider ways that we can strengthen outcomes for our community. The project not only strengthened our partnership with The Healing Foundation, but it provided us with the evidence that empowers us to talk confidently about the impact of Dardi's programs.

This recognition of our practice by The Healing Foundation demonstrates that the investment from government and our community partners in Dardi is not only transforming the lives of Aboriginal men and their families, it is saving money. Hopefully this will result in a long-term funding commitment so that we and other Aboriginal family healing programs can consolidate and build on our success to date.

I would like to acknowledge our partners and supporters, including the Victorian Government, Collingwood Football Club, Melbourne Storm, the Aboriginal Community Health Organisations, other Aboriginal organisations we have partnered with across Victoria, The Healing Foundation, Deloitte Access Economic, the Dardi team, and importantly our Aboriginal community partners.

Most importantly I would like to acknowledge that Dardi would not exist without the vision, wisdom, guidance, and commitment of our Elders. The evidence presented in this report is a testament to their wisdom and resilience and the power of Aboriginal and Torres Strait Islander Elders across our nation.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'Alan Thorpe'. The signature is stylized and fluid, with a long horizontal stroke at the end.

Alan Thorpe
Director
Dardi Munwurro

Message from the Chair

The Healing Foundation



Aboriginal and Torres Strait Islander peoples have upheld and maintained sacred cultural practices and ancient protocols that have contributed to the oldest living continuous culture in the world.

However, many mainstream services we interact with, particularly those in the domestic and family violence space, fail to both recognise and understand the impacts of trauma caused by the widespread and deliberate disruption of populations, cultures, and languages over the past 230 years.

More specifically, colonisation and the forced removal of children from their families and communities has led to the disregard of Aboriginal and Torres Strait Islander knowledge systems and the subsequent undermining of First Nations men.

This has caused our men, our women, their families, and communities to suffer the burden of living with comprehensive socioeconomic disadvantage.

As a result, Aboriginal men in particular experience poor physical, social, and emotional wellbeing, low self-esteem, poverty and unemployment, substance misuse, family and community violence, sexual abuse, offending, incarceration, and suicide.

Often these issues are presented as chronically entrenched and not amenable to any form of resolution. However, our work at The Healing Foundation shows that solutions are not only possible, but readily available in the practices left to us by our ancestors, and those ancient knowledge systems that have sustained our peoples for the past 60,000 years.

When you fully commit to partnering with and walking alongside community, remarkable things can happen. In particular, we have seen men's programs and healing work have a positive impact on families and communities when those programs are designed and led by our men and supported by our women.

When Aboriginal men come together to find solutions, the healing process has started. Such approaches are accessible to all Aboriginal men irrespective of whether they live in cities, or remote communities across Australia. By amplifying the voices of our men and boys, by understanding and addressing the destabilisation of our ways of living, we are healing trauma.

By supporting men through cultural, educational, and therapeutic healing activities to increase their confidence and capacity to gain meaningful employment, and to overcome issues like family and domestic violence, incarceration, and poor health and wellbeing, Aboriginal men are taking back leadership qualities that were lost in colonisation.

This report builds the evidence base of Aboriginal and Torres Strait Islander men's healing programs, and thus promotes the benefits of men and boys to reconnecting with cultural values, the restoration of identity, and the building of positive family and community relationships.

We need Aboriginal men and boys to be strong. We need Aboriginal women and children to feel safe both in their homes and within the community. We want to change the learnt dysfunctional behaviours produced by intergenerational trauma that undermine the strengths of our culture and communities.

This report shows that change happens when we work with Aboriginal men to create a place of safety, providing an environment for them to speak for themselves, tell their own stories, and be in charge of their own healing.



Change happens when we promote trauma-aware, healing-informed policies and practices to work with government, policymakers, and workforces to better understand their respective roles in achieving intergenerational healing outcomes for Aboriginal men.

By addressing unresolved trauma in First Nations communities – trauma that was caused by colonisation and actions like the forced removal of children – we are walking alongside communities on the path to healing.

The Healing Foundation acknowledges the many people who supported the development of this report, including Alan Thorpe, Juliet Frizzell, David Creelman, Kate Palmer, Lou Turner and Patrick Shepherdson. We thank the staff at Deloitte Access Economics and Dardi Munwurro for their time and care for this important piece of work for the future of our men and boys, and their families and communities.

Thank you to you all.

Professor Steve Larkin
Chair, The Healing Foundation

Executive summary

Deloitte Access Economics was engaged by The Healing Foundation to analyse the impact of Dardi Munwurro's men's healing programs. The purpose of this report is to help build the evidence base regarding the benefits of Aboriginal and Torres Strait Islander men's healing programs, which include supporting men to reconnect with cultural values and build positive family relationships.

These benefits include economic benefits, such as improved employment outcomes, decreased health expenditure and a reduction in justice systems costs. They also include non-economic social benefits, particularly in terms of connection to culture, restoration of identity and strength of relationships with family and community.

Dardi Munwurro

Established in 2000, Dardi Munwurro is an organisation that provides a range of men's healing programs, behaviour change programs and services to the Victorian Aboriginal¹ community. It aims to break the cycle of intergenerational trauma in the Aboriginal community and disrupt the patterns of behaviour that can result in domestic violence. These programs support Aboriginal men to recognise their emotions, strengths and their own responsibility by using traditional Aboriginal healing practices.

Aboriginal and Torres Strait Islander men's healing programs engage men in activities and dialogues that aim to raise the participant's awareness and appreciation of their Aboriginal and Torres Strait Islander culture, kinship ties, and roles.² These programs, which typically incorporate a behaviour change component, offer culturally tailored peer support and formal counselling processes, and help to identify and address trauma.³ Activities occur in a culturally safe setting, such as traditional lands or at Aboriginal and Torres Strait Islander community-controlled locations.

Programs in scope

Three of Dardi Munwurro's men's healing programs are within the scope of this report:

- **The Men's Healing and Behaviour Change (MHBC)** program is held through weekly men's group sessions in Melbourne, and fortnightly men's group sessions across Victoria. It addresses the drivers for violence by strengthening cultural connection, developing pride and confidence, and planning a future with healthy relationships in families and communities.
- **Ngarra Jarranounith Place (NJP)** is a 16-week intensive residential program that supports at-risk men to strengthen their spirit and culture, adopt positive behaviours, and nurture healthy relationships.
- **The Journeys Program (Bramung Jaarn)** draws on key elements of the MHBC program to engage and empower young Aboriginal men with the intention of diverting them from the justice system. The program supports those aged 10 to 17 years to transition to healthy adulthood with positive support networks through group sessions, one-on-one mentoring, and access to strong male mentors and Elders.

1 For the purposes of this report, the term 'Aboriginal and Torres Strait Islander' has been used to refer to Aboriginal and Torres Strait Islander peoples as a collective, and 'Aboriginal' when referring specifically to Dardi Munwurro clients to reflect the terminology used by the program.

2 No to Violence (2018). Victorian Aboriginal Men's Program Literature Review.

3 McCalman et al. (2010).

Analysis approach

A mix of quantitative and qualitative methods were used to analyse the impacts of the programs.

- **Chapter 2: Program outcomes** outlines the participant outcomes data collected by Dardi Munwurro, demonstrating the impact of the program across a range of domains. To evaluate the impact of the programs within the context of Aboriginal and Torres Strait Islander healing, the social determinants of Aboriginal and Torres Strait Islander health as defined by the Sydney Metropolitan Local Aboriginal Health Partnership have been applied.
- **Chapter 3: Cost-benefit analysis** presents the results of a cost-benefit analysis that compares the monetised value of the program benefits with the costs of delivering the benefits. Of the outcomes data collected, the benefits that were able to be monetised and thus included in the cost-benefit analysis include:
 - » The increase in the employment rate among program participants.
 - » The reduced rate of Community Correction Orders (CCOs) due to program participation.
 - » The lower risk of incarceration among program participants.

Program outcomes

Using the social determinants of Aboriginal and Torres Strait Islander health as a framework, analysis of Dardi Munwurro participant data showed that the programs are leading to positive outcomes for participants across a range of social domains.

At the forefront of Dardi Munwurro's programs is its mission to help Aboriginal men and young men to rediscover their **cultural identity and strengthen their spirit**. Embedded in the MHBC, NJP and Journeys Program are healing techniques that are specifically designed to support clients on their path to achieving these goals. For Aboriginal and Torres Strait Islander populations, **connection to family, community, and culture is key to having a positive self-identity and achieving positive health and wellbeing outcomes**. Connection to culture and community promotes positive self-esteem and resilience, which in turn allows individuals to address other issues they may be facing, such as mental health issues or use of alcohol and other drugs.⁴ **Across the programs, participants reflected a greater connection to culture and stronger sense of identity as a result of their involvement**. Additionally, the data demonstrates that Dardi Munwurro's programs are leading to **increased feelings of improved relationships, taking responsibility for behaviour, and connections to community**.

Substance abuse has long presented as a health challenge within Aboriginal and Torres Strait Islander communities. According to the Australian Institute of Health and Welfare, almost one in five Aboriginal and Torres Strait Islander Australians reported risky alcohol consumption at least once a month – 2.8 times the rate of non-Indigenous Australians. **Conquering substance abuse is a central component of Dardi Munwurro's overall mission and is integral to program objectives**. Many of those engaged in the programs suffer from addiction, with 80% of all participants across the three programs reporting recent issues with substance abuse. However, **at the conclusion of the program, only 34% reported misusing alcohol and other drugs**.

Having access to secure and appropriate housing is another significant issue faced by Aboriginal and Torres Strait Islander peoples. While Dardi Munwurro's programs do not provide direct housing support, **the wraparound support provided to clients has**

⁴ Aboriginal Victoria (2019). *Victorian Government Aboriginal Affairs Report 2019*. Accessed at: <https://www.aboriginalvictoria.vic.gov.au/victorian-government-aboriginal-affairs-report-2019/print-all>

resulted in marked improvement in housing outcomes, by connecting participants with related service providers. The number of people experiencing **homelessness reduced by 100%** across all three programs (12 pre-program to none in the six-month post-program period). Likewise, there was a 45% (33 pre-program to 48 post-program) increase in the number of those returning to family/kinship homes or securing their own accommodation.

Educational and employment outcomes are considerably worse among Aboriginal and Torres Strait Islander peoples. In 2016, Year 12 or equivalent attainment rates for Aboriginal and Torres Strait Islander peoples were approximately 24 percentage points lower compared to non-Indigenous people.⁵ The Journeys Program, which supports Aboriginal children and teenagers, has realised vast improvements in educational engagement.

The number of clients engaged in some form of education almost doubled, while the number of those disengaged halved. Additionally, across all programs, there was an **increase in the number of clients who had gained employment** between commencing and completing the program.

While those who initially engage with Dardi Munwurro are typically experiencing poorer outcomes across several of the above domains, **the programs are designed to directly affect some of the drivers of contact with the justice system.** Participants are engaged in the programs due to either being in contact or at-risk of contact with the justice system. Following the program, participants were less likely to be incarcerated, or the subject of a court order.

The program is also contributing to improved family violence outcomes. The MHBC, which is specifically designed to support men who have used or are at risk of using violence, **has demonstrated improvements in their client outcomes.** Of the most recent cohort, 24 participants (92%) presented to the program having had a recent episode of domestic and/or family violence that required police involvement (including an arrest). Following the program, only three participants reported another episode, translating to an 80% reduction – see Chart 2.13. However, it must be noted that this is reported by participants themselves and has not been validated using reports from victims (see discussion in Section 1.2 and Section 2.7).

Cost-benefit analysis

A cost-benefit analysis of the programs was conducted to determine whether program outcomes discussed above – the benefits – outweighed the costs of delivering the program. The program outcomes that were included in the analysis related to improved employment outcomes, as well as reduced rates of contact with the justice system through incarceration and CCOs.

The key uncertainty in the analysis relates to the period over which benefits are sustained once men complete the program. This is referred to as the benefits erosion period, and it was modelled as a range of 3-7 years, consistent with prior Deloitte Access Economics methodologies.

The results of the cost-benefit analysis are summarised in Table i. Given the uncertainty surrounding the benefits erosion period, the results should be interpreted as a range. Using the mid-range discount rate (7%), the benefit-cost ratio of the men's healing programs is estimated to range from 1.50-2.90. Thus, **each dollar invested into Dardi Munwurro is estimated to provide a return on investment of 50%-190%.** As it was not possible to quantify all benefits from the program, the analysis should be viewed as a conservative estimate of benefits.

5 Department of the Prime Minister and Cabinet (PM&C) (2019). Closing the Gap Prime Minister's Report 2019. Canberra: PM&C

Table i Summary of results (7% discount rate)

	Benefits erosion period		
	3 years	5 years	7 years
Benefits	\$2,751	\$4,107	\$5,315
Costs	\$1,832	\$1,832	\$1,832
Benefit-cost ratio	1.50	2.24	2.90
Return on investment	50%	124%	190%

Source: Deloitte Access Economics analysis

The largest stream of benefits delivered by the Dardi Munwurro programs are through the reduced rates of incarceration. This result is to be expected, given that the rate of incarceration decreased from 13% pre-program to 4% post-program, and that each avoided case of incarceration represents a saving to government of more than \$90,000 per annum.

The benefits erosion period has a significant impact on the overall returns from the program. It is recommended that Dardi Munwurro consider capturing longitudinal participant data to enable the benefits erosion period to be identified more precisely, and to address other limitations of the data, which are outlined in Chapter 2.

Deloitte Access Economics



1.0 Introduction

This chapter provides an overview of Dardi Munwurro’s men’s healing programs. It also outlines the scope of the report and the data that was collected to assess the impact of the programs.

For Aboriginal and Torres Strait Islander⁶ peoples living today, the impacts of colonisation persist as outcomes across a range of health and social measures that fall behind that of the general population. As a result of the inequalities that exist, and the disadvantage experienced by many Aboriginal and Torres Strait Islander peoples, some people have turned to engaging in antisocial behaviours, including violence and/or self-harm.⁷

Addressing the social and emotional wellbeing of Aboriginal and Torres Strait Islander peoples is fundamental to reducing antisocial behaviour, including the use of violence. This encompasses a person’s connection to culture, their relationships with community and family, and their strength of identity. As such, Aboriginal and Torres Strait Islander men’s healing programs play an important role in helping men to overcome the factors that result in negative behaviours, by affecting social and emotional wellbeing.⁸

‘To heal, a person must be able to come to a place that is safe and allows them to deal with the pain of the past, process this and begin their healing journey. If people don’t heal, they will not be able to change their behaviours and will continue to be victims and perpetrators of violence. Aboriginal people must be able to govern their own path of healing, to deal with past injustices, such as colonisation and its effects, in order to move into a future which will sustain their livelihood and foster a just society.’⁹

Aboriginal and Torres Strait Islander men’s healing programs engage men in activities that aim to raise the participant’s awareness and appreciation of their Aboriginal and Torres Strait Islander culture, kinship ties, and roles.¹⁰ These programs, which typically incorporate a behaviour change component, offer culturally tailored peer support and formal counselling processes, and help to identify and address trauma.¹¹ Activities occur in a culturally safe setting, including on traditional lands or at Aboriginal and Torres Strait Islander community-controlled premises.

Established in 2000, Dardi Munwurro is an Aboriginal organisation that provides a range of men’s healing programs, behaviour change programs, and services to the Victorian Aboriginal community. It aims to break the cycle of intergenerational trauma in the Aboriginal community and disrupt the patterns of behaviour that can result in domestic violence. These programs support Aboriginal men and young men to identify their emotions, strengths, and their own responsibility, by using traditional Aboriginal healing practices.

6 For the purposes of this report, the term ‘Aboriginal and Torres Strait Islander’ has been used to refer to Aboriginal and Torres Strait Islander peoples as a collective, and ‘Aboriginal’ when referring specifically to Dardi Munwurro clients to reflect the terminology used by the program.

7 Dudgeon, P., Walker, R., Scrine, C., Shepherd, C., Calma T. & Ring, I. (2014) Effective strategies to strengthen the mental health and wellbeing of Aboriginal and Torres Strait Islander people, *Issues paper no. 12*, Closing the Gap Clearinghouse, AIHW, Canberra.

8 McCalman, J., Tsey, K., Wenitong, M., Wilson, A., McEwan, A., James, Y.C. and Whiteside, M. (2010) Indigenous men’s support groups and social and emotional wellbeing: a meta-synthesis of the evidence. *Australian Journal of Primary Health*, 16(2): 159-166.

9 Cox, D., Young, M. and Bairnsfather-Scott, A. (2009). No justice without healing: Australian Aboriginal people and family violence. *Australian Feminist Law Journal*, 30(1): 151-161.

10 No to Violence (2018). Victorian Aboriginal Men’s Program Literature Review.

11 McCalman et al. (2010).

Dardi Munwurro's long-term objectives include:

- Reducing violent behaviour.
- Enabling stronger and more resilient men.
- Improving family relationships.
- Increasing uptake of services and supports by participants.

The sections below highlight some of the programs run by Dardi Munwurro.

Men's Healing and Behaviour Change program

The Men's Healing and Behaviour Change (MHBC) program is held through weekly men's group sessions in Melbourne, and fortnightly men's group sessions across Victoria. It is designed to address the drivers for violence by strengthening cultural connection, developing pride and confidence, and planning a future with healthy relationships in families and communities. Dardi Munwurro also delivers men's healing camps and week-long men's behaviour change programs in prisons in Victoria, which enable men in custody to link with Ngarra Jarranounith Place (described below) or ongoing men's healing and behaviour change groups. MHBC programs are open to all men, and accept referrals from Corrections Victoria and the Koori Court for men to complete a 40-hour program, designed to comply with 'No to Violence' 40-hour minimum standard.

The program format involves men's group counselling sessions led by two facilitators and supported by community Elders. Participants generally have complex support needs, with many experiencing a range of health and/or social challenges. Group sessions are centred around themes such as intimacy, responsibility, communication, emotions, leadership, and relationships. MHBC programs recently commenced delivery of one-week intensive behaviour change programs delivered to Aboriginal men in prison.

Ngarra Jarranounith Place

Ngarra Jarranounith Place (NJP) is a 16-week intensive residential program that supports at-risk men to strengthen their spirit and culture, adopt positive behaviours, and nurture healthy relationships. The program accepts men on Family Violence Intervention Orders, those charged with family violence offences in the previous 12 months, court-ordered referrals, and self-referrals from Dardi Munwurro's prison program.

NJP offers accommodation through three transitional houses and structured weekly development programs that include a vocational program with Parks Victoria, music, writing (to support men to acknowledge their emotions), art, and other cultural programs, including smoking ceremonies, yarning circles, and meditation.

The program is overseen by a clinical governance group that includes an Aboriginal psychologist and other professionals. It also includes medically supervised detoxification (if required) and enables men to transition back into the community where they can access sustained support through the MHBC program. A Family Engagement and Safety worker was recently recruited to provide support to the family of men who are participating in the NJP. The program offers intensive one-on-one support and group activities that are structured around the following themes: strong spirit and strong culture, taking responsibility, and healthy relationships. The program aims to provide stable housing for 16 weeks, during which time clients are drug and alcohol free, allowing them to engage with services (such as Aboriginal housing) to give them a stable platform to enable their ongoing healing. Follow-up support is offered after program completion for up to 18 months, and men are encouraged to maintain connection with their local men's groups.

Journeys Program

The Journeys Program (Bramung Jaarn) draws on key elements of the MHBC program to engage and empower young Aboriginal men, with the intention of diverting them from the justice system. The program supports those aged 10 to 17 years to transition to healthy adulthood with positive support networks, through group sessions, one-on-one mentoring, and access to strong male mentors and Elders. One-on-one Aboriginal Youth Support is also offered to divert young people away from the justice system.

Young people who engage in the program often present with complex needs, and may have experienced issues including self-harming, mental health challenges, involvement with child protection services, violence or abuse, contact with the justice system, substance abuse and lack of parental role models. The model used by the Journeys Program focuses on fostering individuals' identity by building resilience, skills, knowledge, and capability across six domains: culture, emotional intelligence, health (physical, and social and emotional wellbeing), relationships, responsibility, and spirit.

Other programs

The Innovations Program was a 12-month program that engaged men aged 18 to 25 years in camps and activities to promote positive behaviour change. Additionally, the Workplace Leadership and Development program, delivered to Aboriginal people in the workforce, provides communication tools for the Aboriginal workforce to build healthy workplaces and practices.

1.1 Scope of report

Deloitte Access Economics was engaged by The Healing Foundation to analyse the impact of Dardi Munwurro's men's healing programs. The purpose of this report is to help build the evidence base regarding the benefits of Aboriginal and Torres Strait Islander men's healing programs, which include supporting men to reconnect with cultural values and build positive family relationships.

These benefits include the potential economic benefits, such as improved employment outcomes, decreased health expenditure, and a reduction in justice systems costs. They also include non-economic benefits, particularly in terms of connection to culture, restoration of identity and strength of relationships with family and community.

The analysis employs a combination of quantitative and qualitative methods to analyse the impacts of Dardi Munwurro's programs with respect to client outcomes.

Chapter 2: Program outcomes uses participant outcomes data collected by Dardi Munwurro, to analyse the impact that the program is having across a range of outcome domains.

Chapter 3: Cost-benefit analysis presents the results of a cost-benefit analysis that compares the monetised value of the benefits with the costs of delivering the benefits.

1.2 Data collection

To inform the discussion in Chapter 2 and the cost-benefit analysis in Chapter 3, Dardi Munwurro collected data from 80 clients across its MHBC, NJP and Journeys Programs. The data that was collected cover a range of metrics. These include misuse of alcohol and other drugs, current employment status, accommodation setting, engagement in school/education, and contact with the justice system.

Data were also collected using a proprietary outcomes tool used by Dardi Munwurro. For the Bramung Jaarn program, the outcomes tool uses a scale from zero to 10 to measure change in regard to emotional intelligence, social and emotional wellbeing, health, spirit, responsibility, relationships, and culture. By recording longitudinal data, change can be measured across each domain with a higher score representing an improvement in the domain.

For the NJP program, an outcomes tool collects data across three domains, with a large number of sub-domains underneath the primary domains. Following the program, participants indicate whether each of the sub-domains has achieved, partially achieved, or not achieved. Participants can also nominate whether they are unsure as to whether the sub-domain has been achieved. The primary domains include:

- **Strong spirit:** Stronger cultural identity, healing, improved connection to community, and increased positive identity.
- **Taking responsibility:** an increased understanding of the impacts of violence, how to manage emotions that lead to violence, decreased justification of violence, understanding their role as an advocate for nonviolence, increased respect for women, and increased engagement with services.
- **Healthy relationships:** decreased belief that violence towards their partner or children is okay, parenting and relating to children in a child-centred way, increased positive relationships between men and women, a decreased use of controlling behaviours within the family, and an increased understanding of broader issues regarding equality.

Much of the data that was provided is collected as a routine part of delivering the programs, and is recorded in participant files. Some of the data relates to the life circumstances of clients pre-program, which are recorded in client files at the time a client commences the program. While some of the post-program data is recorded at conclusion of the program, other aspects of post-program data (for example, employment outcomes post-program), is collected by following up clients approximately six months after they have completed the program.

It is important to note the limitations of the data that were collected. While some of the data is objectively recorded by program administrators, some data is self-reported by clients. The primary limitation of self-reported data is that this can lead to inaccurate reporting due to social desirability bias.¹² Social desirability means that individuals may be inclined to provide responses that are considered to be socially desirable, such as understating the use of alcohol. Thus, there is potential for socially desirable improvements in the pre- and post-program data to be overreported.

Instances of self-reporting that carry a higher risk of social desirability bias may include situations where clients indicate the degree to which program outcomes have been achieved, or clients self-reporting on their life circumstances (for example, their employment status).¹³

¹² Althubaiti, A. (2016). Information bias in health research: definition, pitfalls, and adjustment methods. *Journal of multidisciplinary healthcare*, 9, 211.

¹³ In addition to the risk of social desirability bias, it is important to note that Deloitte Access Economics was not able to verify the accuracy of the data that was provided by Dardi Munwurro for undertaking this report.





2.0 Program outcomes

This chapter assesses the impact of Dardi Munwurro’s men’s healing programs on participant outcomes.

To appropriately evaluate the impact of the programs within the context of Aboriginal and Torres Strait Islander healing, the social determinants of Aboriginal and Torres Strait Islander health (‘the social determinants’),¹⁴ as defined by the Sydney Metropolitan Local Aboriginal Health Partnership, have been employed as an assessment framework. These social determinants of health were selected in consultation with medical professionals and Aboriginal and Torres Strait Islander community leaders. Figure 2.1 provides an overview of the social determinants.

Figure 2.1 Social determinants of Aboriginal and Torres Strait Islander health



Source: Sydney Metropolitan Local Aboriginal Health Partnership.

For the purposes of this report, access to early childhood education/services and freedom from racism are not assessed, as the programs are not intended to affect these determinants. The analysis in this section relates to the MHBC, NJP, and Journeys Programs in aggregate unless otherwise stated.

¹⁴ Sydney Metropolitan Local Aboriginal Health Partnership (2016). Social Determinants of Aboriginal and Torres Strait Islander health forum, Report and recommendations.

2.1 Connectedness

There is a large volume of evidence that links a strong identity with increased wellbeing and resilience of Aboriginal and Torres Strait Islander peoples.¹⁵ Conversely, being isolated or disconnected from one's identity is understood to have a negative impact on Aboriginal and Torres Strait Islander health.¹⁶ Importantly, within the Aboriginal and Torres Strait Islander context, identity is firmly situated within culture and may not be fully realised without a connection to it.

For example, one study of Victorian Aboriginal men charged with violent offences found strong evidence to suggest that engagement with one's culture was significantly associated with the engendering of a cultural identity, which in turn reduced the likelihood of recidivism.¹⁷

One of the most lasting consequences of colonisation and the Stolen Generations has been the loss of culture and identity that many have experienced, which has been compounded over several generations. This stemmed from not only the separation of children from their families and heritage but also from the dispossession of land, systematic racism, and denial of culture.¹⁸

Cultural engagement is therefore central to the restoration of identity and paramount to the process of Aboriginal and Torres Strait Islander healing. This process has the capacity to affect the transmission of intergenerational trauma and abuse, which has resulted from colonisation, and provide the foundation for cultural renewal.¹⁹ Healing also provides the basis for a positive self-image and healthy identity.

“Cultural identity depends not only on access to culture and heritage but also on opportunities for cultural expression and cultural endorsement within society’s institutions. Identity [for Aboriginal and Torres Strait Islander peoples] is to a large extent a collective experience.”²⁰

Connection to community and family is also another imperative element of social and emotional wellbeing within the Aboriginal and Torres Strait Islander context. These connections are not only essential to the functioning of Aboriginal and Torres Strait Islander communities but also provide networks that can help individuals to cope with disadvantage and stress.²¹ Engagement with culture emphasises membership and connection to a group, socially defined roles that call for moral and civic responsibility, and ways to enact these roles in service of a greater purpose.²²

15 Wexler, L. (2009). The importance of identity, history, and culture in the wellbeing of Indigenous youth. *The Journal of the History of Childhood and Youth*, 2(2): 267–276.

16 Nettleton, C, Napolitano, DA, Stephens, C. (2007). An overview of current knowledge of the social determinants of Indigenous health. Symposium on the social determinants of Indigenous health, Adelaide, April 2007. Geneva: World Health Organization.

17 Shepherd, S.M., Delgado, R.H., Sherwood, J. and Paradies, Y., (2018). The impact of Indigenous cultural identity and cultural engagement on violent offending. *BMC public health*, 18(1), p.50.

18 King, M., Smith, A. and Gracey, M. (2009). Indigenous health part 2: the underlying causes of the health gap. *The Lancet*, 374(9683): 76–85.

19 Australian Human Rights Commission (AHRC) (2007). *Social Justice Report 2007*. Sydney: AHRC.

20 Durie, M., Milroy, H. and Hunter, E. (2009). Mental health and the Indigenous peoples of Australia and New Zealand. In: Kirmayer LJ, Valaskakis GG, eds. *Healing traditions: the mental health of Aboriginal peoples in Canada*. Vancouver: UBC Press, 36–55

21 Social Health Reference Group (SHRG) (2004). *National Strategic Framework for Aboriginal and Torres Strait Islander People's mental health and social and emotional wellbeing 2004–2009*. Canberra: Department of Ageing, National Aboriginal and Torres Strait Islander Health Council and National Mental Health Working Group.

22 Wexler, L. (2009).

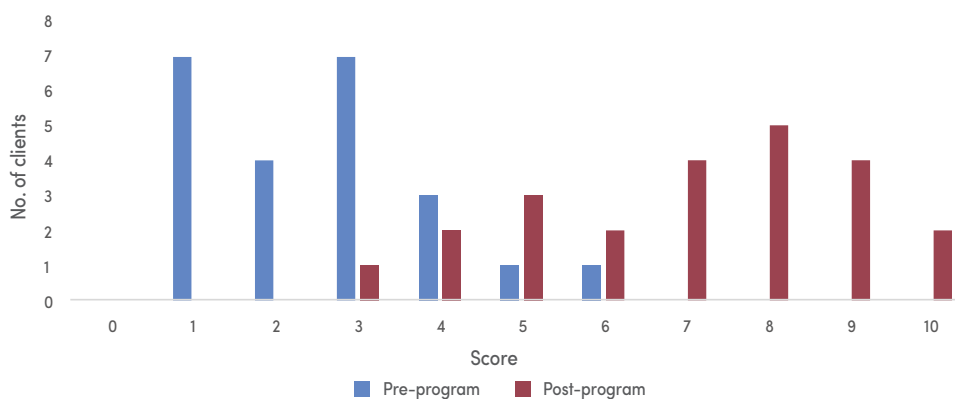
2.1.1 Culture and identity

At the forefront of Dardi Munwurro’s programs is its mission to help Aboriginal men and young men to rediscover their cultural identity and strengthen their spirit. Embedded in the MHBC, NJP, and Journeys Programs are healing techniques that are designed to support achieving these goals.

For Aboriginal and Torres Strait Islander peoples, connection to family, community, and culture is key to having a positive self-identity and achieving positive health and wellbeing outcomes. These outcomes promote positive self-esteem and resilience, which in turn allow individuals to address other issues they may face, such as mental health issues or substance misuse.²³

Across the programs, participants have reflected a greater connection to culture and stronger sense of identity as a result of their involvement. This was assessed using an outcomes tool that measures participant responses to ‘spirit’ and ‘culture’ domains both before and after program completion, on a 10-point scale (see discussion in Section 1.2). Charts 2.1 and 2.2 show increases across both these domains following completion of the program.

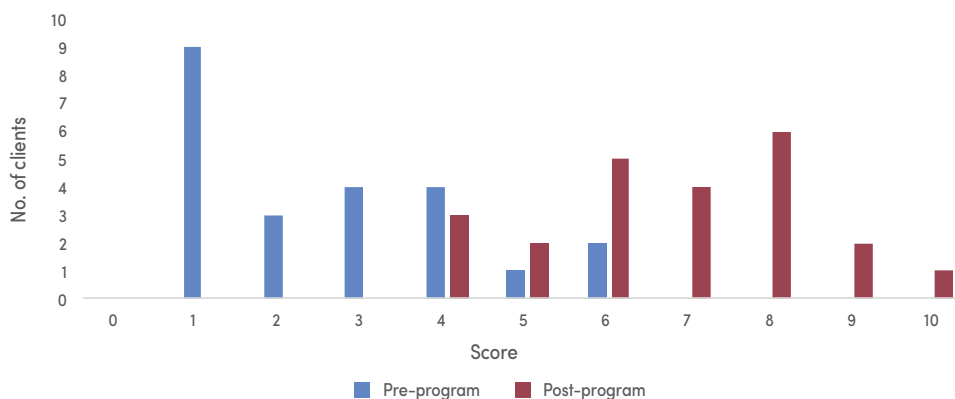
Chart 2.2 Outcomes tool: spirit – Journeys Program



Source: Dardi Munwurro program data

Note: 0 represents the outcome has not been achieved, 10 indicates outcome has been achieved. n=23

Chart 2.3 Outcomes tool: culture – Journeys Program



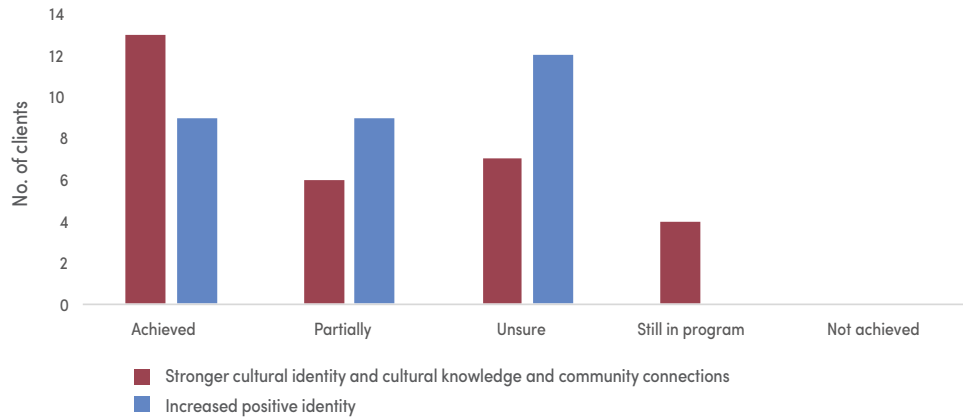
Source: Dardi Munwurro program data

Note: 0 indicates the outcome has not been achieved, 10 indicates outcome has been achieved. n=23

²³ Aboriginal Victoria (2019). Victorian Government Aboriginal Affairs Report 2019. Accessed at: <https://www.aboriginalvictoria.vic.gov.au/victorian-government-aboriginal-affairs-report-2019/print-all>

Chart 2.4 shows results for the NJP program, which demonstrate that the majority of respondents who had completed the program consider that they had achieved or partially achieved stronger cultural identity, cultural knowledge, and community connections, and had also increased positive identity.

Chart 2.4 Outcomes tool: culture – NJP



Source: Dardi Munwurro program data. Note: n=30

2.1.2 Relationships, community, and responsibility

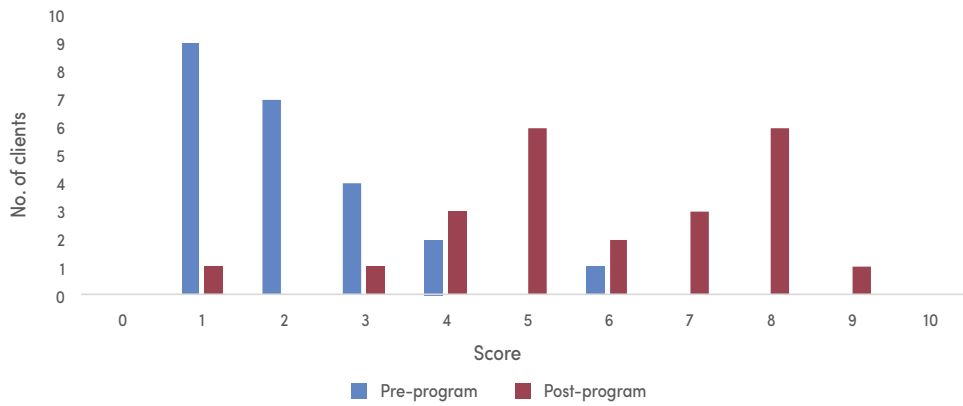
A key element of Dardi Munwurro’s programs is to build trust between the individual and their family or community Elders, particularly in the Journeys Program where young people may lack relationships with positive role models. Having strong community and family connections can be a protective factor in maintaining mental health and emotional wellbeing, by providing a support system to draw on during times of crisis.²⁴

Additionally, having a culturally safe and strong family support service can assist in reducing incidences of family violence, which has a disproportionate impact on Aboriginal and Torres Strait Islander communities. As a result of the recommendations made by the Victorian Royal Commission into Family Violence, the Victorian Government provided increased funding for Aboriginal community-led and culturally appropriate family violence programs. The Dardi Munwurro NJP is an example of such a program, aimed at providing a specialised service for Aboriginal perpetrators of family violence, funded through the Department of Justice and Community Services. Through these programs, participants are encouraged to recognise the impact that their violence has on their family members and take responsibility for this to lead to behaviour change.

Chart 2.5, Chart 2.6, and Chart 2.7 demonstrate that Dardi Munwurro’s programs are leading to increased feelings of improved relationships, taking responsibility for behaviour, and connections to community.

²⁴ Aboriginal Victoria (2019). Victorian Government Aboriginal Affairs Report 2019. Accessed at: <https://www.aboriginalvictoria.vic.gov.au/victorian-government-aboriginal-affairs-report-2019/print-all>

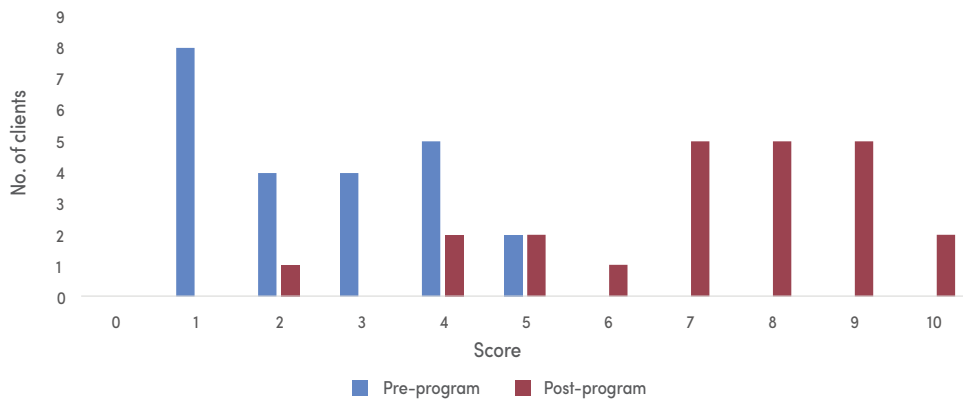
Chart 2.5 Outcomes tool: relationships – Journeys Program



Source: Dardi Munwurro program data

Note: 0 indicates the outcome has not been achieved, 10 indicates outcome has been achieved

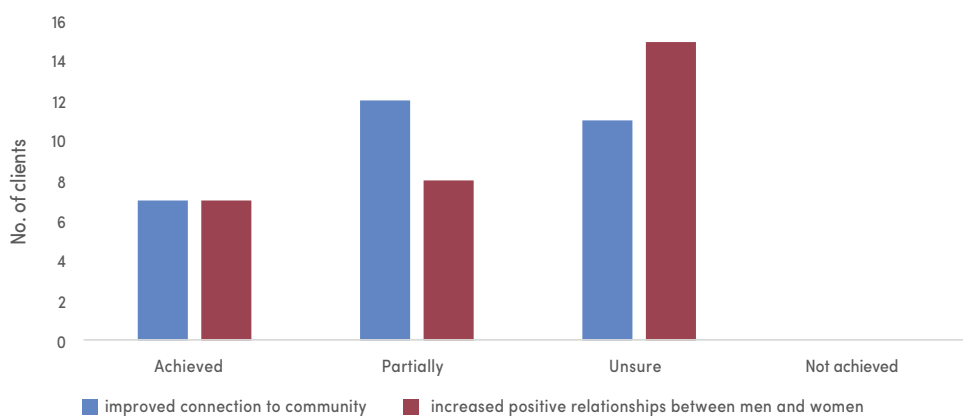
Chart 2.6 Outcomes tool: responsibility – Journeys Program



Source: Dardi Munwurro program data

Note: 0 indicates the outcome has not been achieved, 10 indicates outcome has been achieved

Chart 2.7 Outcomes tool: relationships and community – NJP



Source: Dardi Munwurro program data

2.2 Use of alcohol and other drugs

Alcohol and other drug misuse has long presented as a health challenge within Aboriginal and Torres Strait Islander communities. According to the Australian Institute of Health and Welfare, almost one in five Aboriginal and Torres Strait Islander Australians reported risky alcohol consumption at least once a month – 2.8 times the rate of non-Indigenous Australians. More than 10% report having used a pharmaceutical for non-medical use – 2.3 times higher than non-Indigenous Australians.²⁵

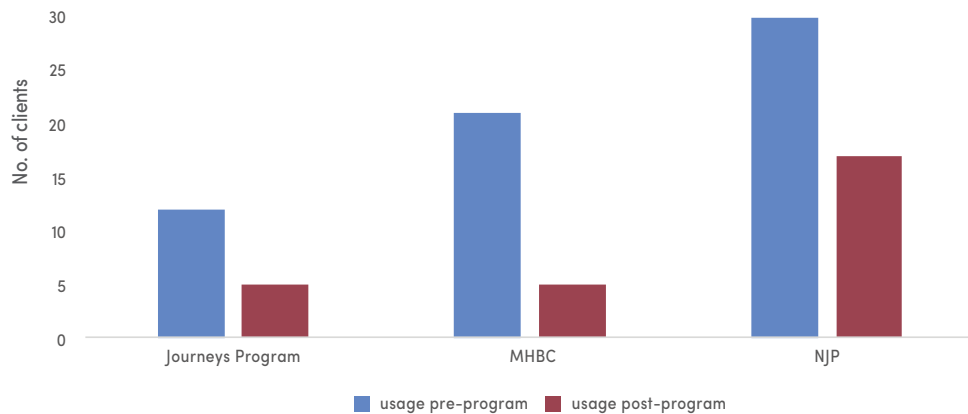
While substance misuse contributes to a number of issues in Aboriginal and Torres Strait Islander communities, including violence and domestic abuse, experiences of trauma and mental illness experienced by First Nations peoples can be a significant factor in subsequent misuse of alcohol and other drugs. Gray et al.²⁶ identify factors that lead to poorer health among Aboriginal and Torres Strait Islander peoples, which are also the primary drivers of substance abuse:

- Social gradient and exclusion – entrenched social and economic disadvantage, in the form of poorer access to education, housing, healthcare and employment.
- Stress, trauma, and racism – many Aboriginal and Torres Strait Islander peoples have stressful lives attributed to the dispossession of family and/or land, a lack of connection with culture, and experiences of systematic racism.
- Early life experience – exposure to, and normalisation of, substance abuse from an early age increases the likelihood of usage.

Reducing substance abuse is a central component of Dardi Munwurro’s overall mission and is integral to the programs’ objective. NJP requires a complete abstinence from substances and provides supervised support for those experiencing addiction to detoxify while they are participating in the program.

This support has led to several clients achieving positive outcomes around substance misuse. Many of those engaged in the programs suffer from addiction, with 80% of all participants across the three programs reporting recent issues with substance misuse. However, following the programs only 34% reported misusing alcohol and other drugs – see Chart 2.8.

Chart 2.8 Pre- and post-program misuse of alcohol and other drugs



Source: Dardi Munwurro program data

25 Australian Institute of Health and Welfare (AIHW) (2017). National Drug Strategy Household Survey 2016: detailed findings. Drug statistics series no. 31. Cat. no. PHE 214. Canberra: AIHW.

26 Gray, D., Cartwright, K., Stearne, A., Siggers, S., Wilkes, E. and Wilson M. (2018) Review of the harmful use of alcohol among Aboriginal and Torres Strait Islander people. *Australian Indigenous HealthInfoNet*.

2.3 Housing

Having access to secure and appropriate housing is another significant issue faced by Aboriginal and Torres Strait Islander peoples. In 2016, 50% of Aboriginal and Torres Strait Islander households lived in public housing, 10% were living in overcrowded dwellings, and approximately 4% were currently experiencing homelessness.²⁷

Like substance misuse, experiences of unstable housing or homelessness are both a cause and effect of other issues faced by Aboriginal and Torres Strait Islander peoples. For example, in 2017–18, 40% of Aboriginal and Torres Strait Islander clients seeking specialist homelessness services assistance had experienced domestic violence, 23% had a current mental health condition, and 12% suffered from substance addiction.²⁸

The wraparound support provided to clients has resulted in marked improvement in housing outcomes, through connecting clients with related service systems. The number of people experiencing homelessness reduced by 100% across all three programs (12 pre-program to none post-program), as did the number of clients who returned to a substance abuse clinic (five pre-program to none post-program). Likewise, there was a 45% increase (33 pre-program to 48 post-program) in the number of those returning to family/kinship homes or securing their own accommodation. The change in clients' accommodation status across all three programs is shown in Chart 2.9.

Chart 2.9 Pre- and post-program accommodation outcomes



Source: Dardi Munwurro program data

²⁷ AIHW (2019). Aboriginal and Torres Strait Islander people: a focus report on housing and homelessness. Cat no. HOU 301. Canberra: AIHW.

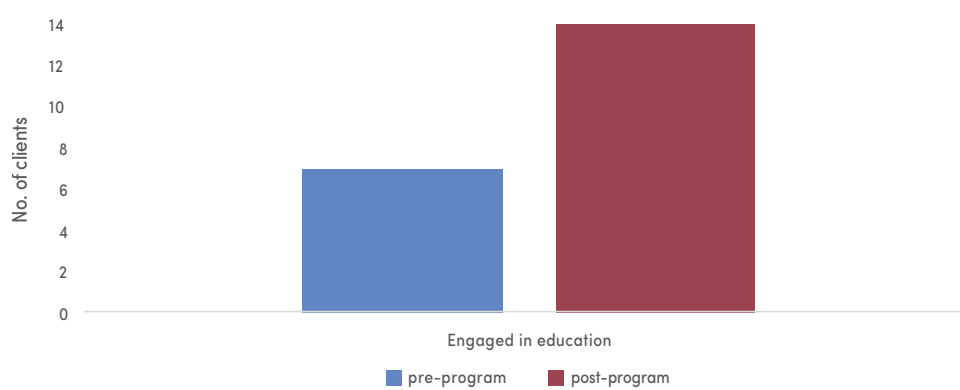
²⁸ 28 AIHW (2019).

2.4 Education

Educational and employment outcomes are considerably worse among Aboriginal and Torres Strait Islander peoples. In 2016, Year 12 or equivalent attainment rates for Aboriginal and Torres Strait Islander peoples were approximately 24 percentage points lower compared with non-Indigenous people.²⁹ Likewise, the gap in literacy and numeracy standards was 17% between Aboriginal and Torres Strait Islander and non-Indigenous Year 9 students in 2018.³⁰

The Journeys Program, which supports Aboriginal children and teenagers, has resulted in improved educational engagement for this cohort. The number of clients engaged in some form of education almost doubled, while the number of those disengaged halved. The change in educational outcomes that resulted from the program are seen in Chart 2.10.

Chart 2.10 Pre- and post-program education outcomes – Journeys Program



Source: Dardi Munwurro program data

The success of the program with respect to educational engagement is highlighted in the following case study.

Case study: Andy's story

Andy was 16 years old and living in the northern suburbs of Melbourne with his mother when he was referred to Dardi Munwurro's Journeys Program. Andy has mild autism and a history of mental illness, including severe social anxiety and depression. Andy had an inpatient stay in a psychiatric hospital in 2016 after a suicide attempt. He has a number of serious health issues arising from misuse of alcohol and prescription drugs, and a poor diet.

In 2016, Andy was referred by his mother due to concerns that he was becoming increasingly withdrawn. At the time, Andy had a long history of poor school attendance and had decided to drop out of school. He had very low self-esteem and poor hygiene habits.

After a meeting between Andy, his mother and the Journeys Program Worker, he reluctantly agreed to join the Journeys Program. Andy attended the Journeys Program camp in early 2017, but he found it hard to engage with the other participants and lacked motivation. After the camp he indicated that he "didn't really want to be involved in the program".

The Journeys Program Worker decided to proactively engage Andy on a one-on-one basis and initiated regular contact to "catch up for a chat". During a catch-up meeting,

29 Department of the Prime Minister and Cabinet (PM&C) (2019). Closing the Gap Prime Minister's Report 2019 Canberra: PM&C

30 Australian Curriculum, Assessment and Reporting Authority (2018). NAPLAN achievement in reading, writing, language conventions and numeracy: national report for 2018. Sydney: ACARA.

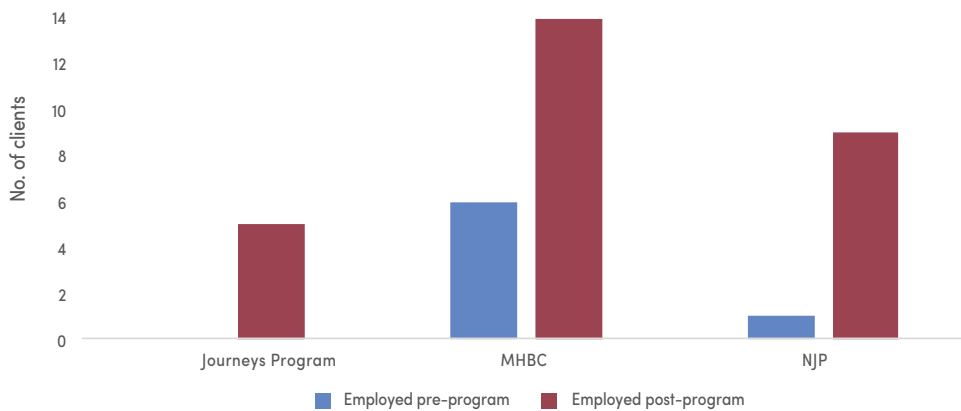
Andy mentioned that he used to like playing football, and it was agreed that the next time they caught up it would be for a kick-to-kick in the local park. The Journeys Program Worker also supported Andy to attend the Victorian Aboriginal Health Service (VAHS) gym for some personal training: “We try to encourage him and lead by example, rather than telling him what he must do”.

The Journeys Program Worker began discussing options for re-engaging in school, distance education, or TAFE, with Andy and his mother. With the support of his mother, Andy enrolled in the Return to Education and Vocation (REV) Program run by the Austin School. Since completing the REV Program, Andy has enrolled in TAFE and is now completing three VCE subjects.

2.5 Employment

Employment outcomes for Aboriginal and Torres Strait Islander peoples make up a significant contribution to the overall gap in outcomes between Aboriginal and Torres Strait Islander peoples and non-Indigenous people. In 2018, the Aboriginal and Torres Strait Islander employment rate was approximately 49%, compared to 75% for non-Indigenous people.³¹ Building opportunities for Aboriginal and Torres Strait Islander peoples to enter the workforce can lead to increased economic prosperity.³² Across all three programs, there was an increase in the number of clients who had gained employment, as demonstrated in Chart 2.10.

Chart 2.11 Pre- and post-program employment outcomes



Source: Dardi Munwurro program data

31 Department of the Prime Minister and Cabinet (PM&C) (2019). Closing the Gap Prime Minister's Report 2019. Canberra: PM&C

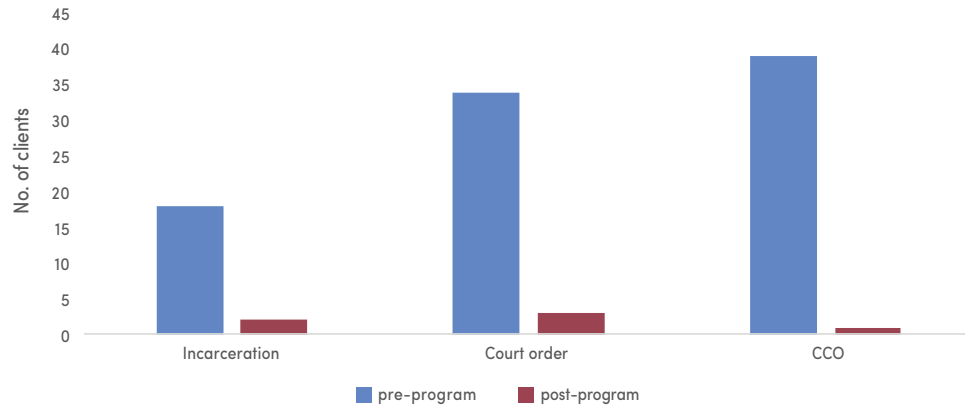
32 Aboriginal Victoria (2019). Victorian Government Aboriginal Affairs Report 2019. Accessed at: <https://www.aboriginalvictoria.vic.gov.au/victorian-government-aboriginal-affairs-report-2019/print-all>

2.6 Contact with the justice system

Aboriginal and Torres Strait Islander peoples are overrepresented in the criminal justice system, comprising almost two-fifths of the incarcerated population in 2018.³³ As with substance misuse, the underlying drivers of these high levels of incarceration are often due to negative outcomes across other social determinants, such as a lack of housing, education and employment, physical and mental health issues, and experiences of trauma and racism. Poor outcomes in one or more of these domains is more likely to lead to antisocial behaviour, such as violence, which frequently results in contact with the justice system.³⁴

While those who initially engage in Dardi Munwurro are typically experiencing poorer outcomes across several of these domains, the programs are designed to directly affect some of the drivers of contact with the justice system, particularly mental health issues and trauma. The changes in contact resulting from the NJP and MHBC programs – with respect to being incarcerated or the subject of a Community Correction Order (CCO) or other court order – are displayed in Chart 2.12.

Chart 2.12 Pre- and post-program justice outcomes – NJP and MHBC



Source: Dardi Munwurro program data

33 AIHW (2019). Adult Prisoners. <https://www.aihw.gov.au/reports/australias-welfare/adult-prisoners>

34 Australian Law Reform Commission (2017). Pathways to Justice – Inquiry into the Incarceration Rate of Aboriginal and Torres Strait Islander Peoples: Final Report (No. 133). ALRC Report.

2.7 Use of violence

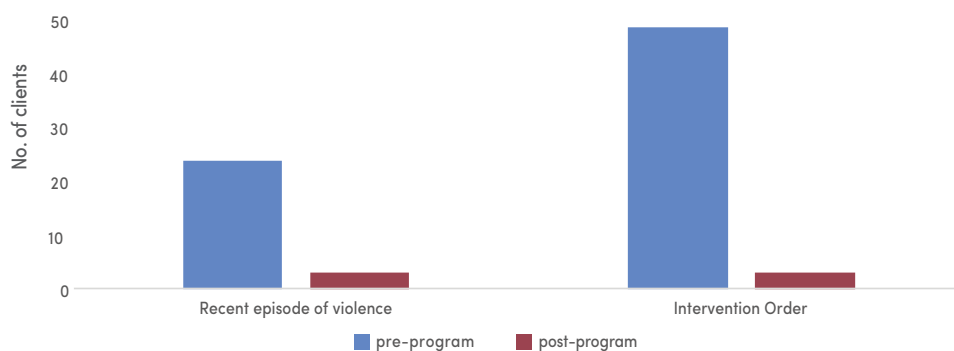
One of the primary goals of Dardi Munwurro's programs is to address the factors that lead to violent behaviour. The perpetration of violence is a significant issue for Dardi Munwurro's clients, and for the wider Aboriginal and Torres Strait Islander population. In 2019, almost half of all Aboriginal and Torres Strait Islander prisoners were sentenced for perpetrating some form of violence.³⁵ More specifically, domestic and/or family violence represents a large challenge. In 2014-15, 63% of Aboriginal and Torres Strait Islander women and 35% of Aboriginal and Torres Strait Islander men who had experienced physical violence reported that the perpetrator of the most recent incident was a family member.³⁶

The causal factors of domestic and/or family violence in Aboriginal and Torres Strait Islander communities are well understood and include intergenerational trauma, intergenerational violence, social disadvantage, adverse mental health, and substance misuse.³⁷ While Dardi Munwurro is limited in its ability to address all facets of disadvantage, its programs directly address intergenerational trauma, mental health, and substance misuse through healing practices.

Outcomes have improved for participants in the MHBC, which is specifically designed to support men who are at risk of using violence. Of the cohort, 24 participants (92%) presented to the program having had a recent episode of domestic and/or family violence that required police involvement (including an arrest). Following the program, only three participants reported another episode, translating to an 80% reduction. Likewise, Intervention Orders against participants reduced from 22 participants (85%) to two participants (8%) following participation in the MHBC and NJP programs – see Chart 2.13.

It is important to note that the recent episodes of violence rely on self-reporting by perpetrators. As discussed in Section 1.2, there may be inherent biases in participants self-reporting socially desirable outcomes – in this case, reduced episodes of violence. Participant self-reporting of episodes of domestic and family violence is particularly prone to social desirability bias, and as such these results should be interpreted with caution.^{38,39}

Chart 2.13 Pre- and post-program episodes of violence outcomes – MHBC and NJP



Source: Dardi Munwurro program data

³⁵ Australian Bureau of Statistics (ABS) (2019). 4517.0 – Prisoners in Australia, 2019. Canberra: ABS.

³⁶ ABS (2016). National Aboriginal and Torres Strait Islander Social Survey, 2014-15. ABS Cat. no. 4714.0. Canberra: ABS.

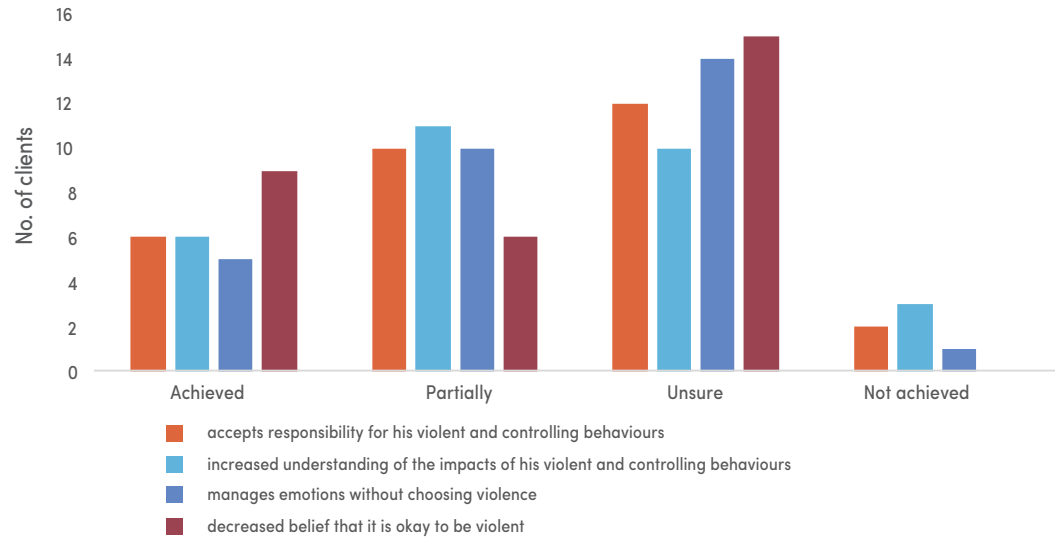
³⁷ Stanley, J., Tomison, A.M. and Pocock, J., (2003). Child abuse and neglect in Indigenous Australian communities. Canberra: Australian Institute of Family Studies.

³⁸ Helfritz, L. E., Stanford, M. S., Conklin, S. M., Greve, K. W., Villemarette-Pittman, N. R., & Houston, R. J. (2006). Usefulness of self-report instruments in assessing men accused of domestic violence. *The Psychological Record*, 56(2), 171-180.

³⁹ Saunders, D. G. (1991). Procedures for adjusting self-reports of violence for social desirability bias. *Journal of Interpersonal violence*, 6(3), 336-344.

There were also noticeable improvements in NJP clients' ability to manage their emotions, understand the impact that violence has on family and community, and accept responsibility for violent actions – see Chart 2.14. It is noted that coming into the program, most men are at a high risk of engaging in violent behaviours.

Chart 2.14 Outcomes tool: violence – NJP



Source: Dardi Munwurro program data

The evidence presented in this chapter suggests that the model of men's healing programs adopted by Dardi Munwurro is having a positive effect on participants across a range of behavioural and social domains. This highlights the importance of programs that are tailored towards the specific needs and experiences of Aboriginal and Torres Strait Islander communities, and that recognise the importance of healing practices, cultural identity, and connection in being able to address the underlying causes of negative behaviours and experiences.

3.0 Cost-benefit analysis

The men's healing programs delivered by Dardi Munwurro provide a range of impacts. Chapter 2 assessed the impact on participant outcomes and identified that the program was delivering benefits in regard to connectedness, use of alcohol and other drugs, housing, education, employment, contact with the justice system, and violence. This chapter presents the results of a cost-benefit analysis that compares the monetised value of the benefits with the costs of delivering the benefits.

In a cost-benefit analysis, the costs and benefits of a base case – in this case, the absence of the Dardi Munwurro program – are compared with the costs and benefits of an intervention – in this case, the Dardi Munwurro program. By monetising the benefits, the costs and benefits of the base case and the intervention can be compared, which allows for a conclusion to be made as to whether the benefits achieved through the intervention outweigh the additional costs of delivering the intervention.

The results of a cost-benefit analysis are expressed in two ways:

- The benefit-cost ratio (BCR) expresses the benefits relative to the costs. For example, a BCR of 2.1 means that \$3 of benefits are delivered relative to each dollar of cost that is invested.
- The return on investment subtracts the initial investment. For example, a program that delivers \$300 from an investment of \$100 has a return on investment of 200%, but a BCR of 3.0.

It is important to note that many flows of resources within society are a zero-sum game. For example, the costs of delivering the Dardi Munwurro programs are a benefit for the recipients of that expenditure. As such, it is important that the perspective of the analysis be defined. For this report, the cost-benefit analysis was undertaken from the government perspective, and so all costs and benefits are calculated from that perspective. As such, only benefits that accrue to government are included in this analysis.

3.1 Scope of analysis

The first step in a cost-benefit analysis is to identify the scope of benefits that will be included. It is not possible to monetise all benefits that are delivered by the Dardi Munwurro programs, as not all programs are capable of being assessed using a standard cost-benefit analysis framework.

As outlined in Section 1.2, Dardi Munwurro undertook primary data collection from men who had participated in their programs. Data were collected from approximately 80 men, and recorded results for participants in the six months prior to the program, and for the six months following the program.

Of the outcomes data collected, the benefits that were able to be monetised and thus included in the cost-benefit analysis were:

- The increase in the employment rate among program participants.
- The reduced rate of CCOs due to participation in the program.
- The lower risk of incarceration among program participants.

- It is important to note that additional areas of benefits – for example, reduced use of alcohol and other drugs, and increased education levels – were not included in the analysis, as the available data did not enable these benefits to be monetised. As such, the benefits that are calculated in the cost-benefit analysis are a conservative quantification of the benefits delivered by the men’s healing programs. The remaining outcomes that were not able to be included in the cost-benefit analysis have been discussed in Chapter 2.

3.2 Structure of the analysis

The cost-benefit analysis was modelled for a cohort of Aboriginal men and youths, who took part in the Dardi Munwurro programs in 2019. The analysis was structured with the base case representing an environment where the Dardi Munwurro programs were not available. In the intervention, Aboriginal men and youths were able to take part in the program. Benefits were calculated for the cohort of participants who took part in the MHBC, NJP and Journeys Program in 2019, who were assessed by Dardi Munwurro staff as having successfully completed the programs.

Given the cohort approach that was used, it was necessary to define the timeframe for which benefits persist. For example, men who took part in the programs in 2019 achieved a higher rate of employment when surveyed six months after they had completed the program. However, it is not known how long these benefits persist for – for example, would the rate of employment among this cohort still be elevated five years after the program had completed, compared to men who had not taken part in the program?

As long-term participant outcomes were not available, sensitivity testing was used to account for this uncertainty. The model calculated three scenarios for the length of time that benefits persisted: three years, five years, and seven years. These timeframes were chosen based on prior Deloitte Access Economics analysis⁴⁰, which utilised analysis of prisoner trajectories.⁴¹ The Allard analysis developed a number of offender trajectories based on the age of onset of offending, and the level of reoffending – low, moderate, and chronic. Across all the cohorts, the time taken for the rate of reoffending to peak and return to base line levels was between 3 and 7 years, and so this range was used for the analysis of Dardi Munwurro clients.⁴²

Over these time periods, benefits were assumed to erode linearly. For example, in the conservative (three-year) scenario, the benefits are greatest in the first year following delivery of the program. In the second year following delivery of the program, the benefits are two thirds of the first-year benefits. By the third year, the benefits are one third of their original level, and by the fourth year they have eroded entirely, whereby the outcomes of men who had taken part in the program have returned to the same levels as if they had not taken part in the program.

The following subsections outline the specifics of the approaches that were used to calculate the benefits from improved employment outcomes, and the benefits from reduced contact with the justice system (both incarceration and CCOs).

40 Deloitte Access Economics. 2018, Transition to Success: Evaluation Report, [https://www2.deloitte.com/au/en/pages/economics/articles/transition-success-evaluation-report.html#:~:text=Transition%20to%20Success%20\(T2S\)%20is,people%20involved%20in%20the%20system.](https://www2.deloitte.com/au/en/pages/economics/articles/transition-success-evaluation-report.html#:~:text=Transition%20to%20Success%20(T2S)%20is,people%20involved%20in%20the%20system.)

41 Allard, T., Stewart, A., Smith, C., Dennison, S., Chrzanowski, A., & Thompson, C. (2014). The monetary cost of offender trajectories: Findings from Queensland (Australia). *Australian and New Zealand Journal of Criminology*, 47(1), 81-101.

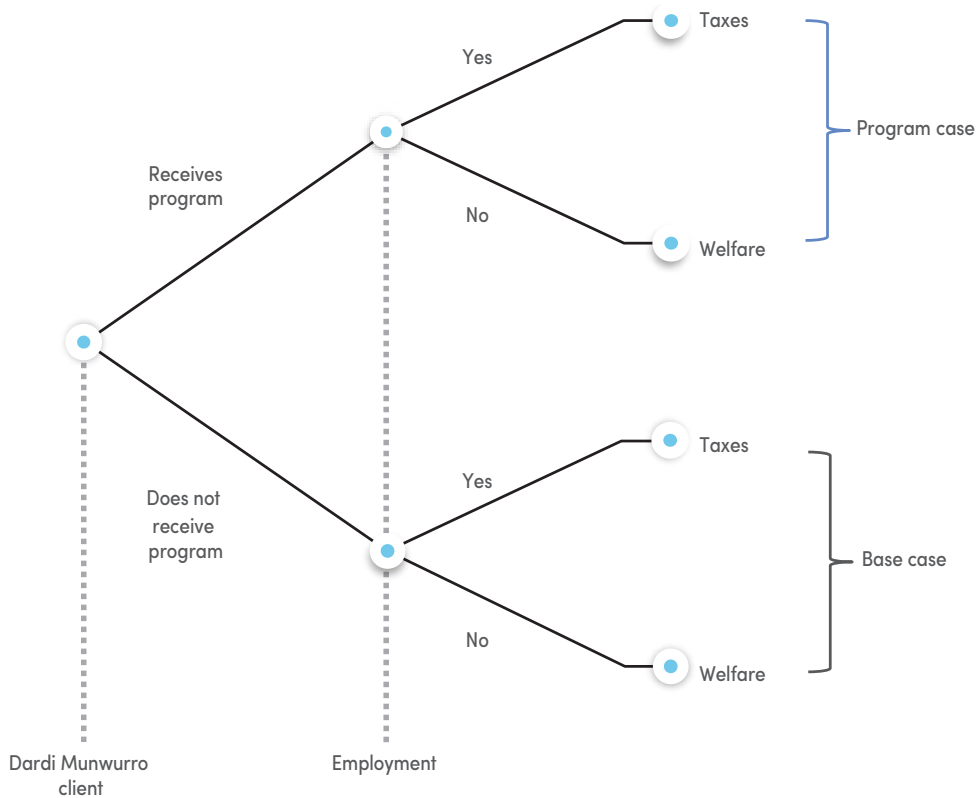
42 While the underlying analysis was specific to rates of reoffending, the analysis was also applied to the timeframes for which employment gains would return to baseline levels, as no comparable analysis for employment outcomes could be located.

3.2.1 Benefits from increased employment

The approach for calculating employment outcomes is shown in Figure 3.1. This shows the different employment outcomes for Aboriginal men when they have taken part in the program, and when they have not taken part in the program. Men who take part in the program have an increased rate of employment relative to men who did not take part in the program. From a government perspective, this increased rate of employment translates into increased tax revenue received by government, and a decrease in the amount of expenditure on welfare payments.

These changes represent the benefit to government from increased employment.

Figure 3.1 Overview of approach for monetising employment outcomes



Source: Deloitte Access Economics

However, not all men who are not employed are unemployed, as some men may not participate in the workforce. As such, data from the Australian Bureau of Statistics^{43,44,45}, the Australian Institute of Health and Welfare⁴⁶, the Australian Council of Social Services⁴⁷, and the Australian Taxation Office⁴⁸ were used to estimate the net change in welfare payments by government, and the net change in tax revenue received by government. The specific model inputs are summarised in Table 3.1.

43 Australian Bureau of Statistics. 2020, 6302.0 – Average weekly earnings, Australia, Nov 2019, <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6302.0Nov%202019?OpenDocument>

44 Australian Bureau of Statistics. 2018, 2076.0 – Census of Population and Housing: Characteristics of Aboriginal and Torres Strait Islander Australians, 2016, <https://www.abs.gov.au/AUSSTATS/Abs@.Nsf/7d12b0f6763c78caca257061001cc588/5f17e6c26744e1d1ca25823800728282!OpenDocument>

45 Australian Bureau of Statistics. 2020, 6202.0 – Labour Force, Australia, Dec 2019, <https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/16BF4424D896F765CA2585130010F8A3?opendocument>

46 Australian Institute of Health and Welfare. 2019, Indigenous income and finance, <https://www.aihw.gov.au/reports/australias-welfare/indigenous-income-and-finance>

47 Australian Council of Social Services. 2019, The impact on households of tax cuts and lifting Newstart Allowance, <https://www.acoss.org.au/wp-content/uploads/2019/04/Impact-of-tax-cuts-and-Newstart-increase-on-households3.pdf>

48 Australian Taxation Office. 2020, Individual income tax rates, <https://www.ato.gov.au/rates/individual-income-tax-rates/>

3.2.2 Benefits from reduced contact with the justice system

To calculate the benefits from reduced contact with the justice system, a similar approach to the approach shown in Figure 3.1 was used for estimating the impact of a reduced rate of CCOs, and a reduced rate of incarceration. The likelihood of incarceration or being subject to a CCO for program participants was calculated in the base case and the intervention, and the costs to government for each cohort were calculated. When contact with the justice system is reduced, the government avoids costs that would otherwise have been incurred.

For the employment analysis, it was assumed that employment outcomes – rates of employment, unemployment, and workforce participation – would remain constant for men who did not take part in the program. However, for the justice system aspects it was necessary to estimate the outcomes for the base case group over the 10-year period. For example, men who were incarcerated prior to the program will be released from incarceration at some future point in time and may or may not subsequently return to jail.

Thus, the model calculated transitional probabilities for the 2019 cohort, to estimate the number of previously incarcerated men who would be incarcerated in each future year, in the absence of the program. The rates of incarceration and CCOs for the intervention cohort were then calculated relative to the base case cohort.

For the purposes of the model, it was assumed that if reoffending was to occur, that it would occur within the 10-year period of analysis. Data from the Australian Bureau of Statistics⁴⁹ identifies that 77.8% of Aboriginal and Torres Strait Islander prisoners have a prior record of imprisonment. While the Australian Law Reform Commission notes that this is not a forecast of the likelihood of future offending for any particular prisoner and doesn't take into account the time period within which reoffending might occur, it is the only measure that is currently available.⁵⁰

Thus, over the 10 years, 77.8% of the men who were incarcerated at the start of the model were assumed to reoffend and return to jail.⁵¹ Results from the Australian Bureau of Statistics⁵² indicate that the median time served in jail is 24 months. Following the period of incarceration, the Productivity Commission's Report on Government Services reported that 46.4% of adults released from prison returned to prison or to corrective services within two years.

For people who are subject to a CCO, 15% will be subject to another CCO within two years. The median length of time of a CCO is 12-24 months, depending on the court that issues the CCO.

The midpoint of this range was used in the analysis.⁵³ No evidence was identified as to the long-term recidivism rate for people subject to a CCO. As such, a proportion of the incarceration recidivism rate was used as a proxy measure.

49 Australian Bureau of Statistics. 2019, *4517.0 – Prisoners in Australia, 2019*, https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/8D5807D8074A7A5BCA256A680081105_4?opendocument

50 Australian Law Reform Commission. 2018, *Recidivism and prior record of imprisonment*, <https://www.alrc.gov.au/publication/pathways-to-justice-inquiry-into-the-incarceration-rate-of-aboriginal-and-torres-strait-islander-peoples-alrc-report-133/3-incidence/recidivism-and-prior-record-of-imprisonment/>.

51 The recidivism rate is for all Aboriginal and Torres Strait Islander offenders regardless of age, as age-specific rates for Aboriginal and Torres Strait Islander peoples are not published by the Australian Bureau of Statistics. While young offenders would be expected to have a lower risk of reoffending (all other things being equal), the only young clients of Dardi Munwurro are in the Journeys Program. Clients in this program (who represent a relatively small proportion of total clients) were not included in the incarceration analysis.

52 Australian Bureau of Statistics. 2019, *4517.0 – Prisoners in Australia 2019*, <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4517.0-2019-Main%20Features-Aborigin%20and%20Torres%20Strait%20Islander%20prisoner%20characteristics%20-13>

53 Sentencing Advisory Council. 2014, *Community Correction Orders Monitoring Report*, https://www.sentencingcouncil.vic.gov.au/sites/default/files/2019-08/Community_Correction_Orders_Monitoring_Report.pdf

3.2.3 Summary of model inputs

The parameter values that were used in the model are summarised in Table 3.1.

Table 3.1 Summary of model inputs

Input	Value	Source
Employment		
Employment rate pre-program	19%	Dardi Munwurro program data
Employment rate post-program	49%	Dardi Munwurro program data
Median weekly person income (Aboriginal and Torres Strait Islander)	\$827	Australian Institute of Health and Welfare
Unemployment weekly assistance	\$283	Australian Council of Social Services
Net average tax rate	12%	Australian Taxation Office
Labour force participation (Aboriginal and Torres Strait Islander)	52%	Australian Bureau of Statistics
Unemployment rate (Aboriginal and Torres Strait Islander)	18%	Australian Bureau of Statistics
Employment rate (Aboriginal and Torres Strait Islander)	42%	Australian Bureau of Statistics
Proportion of unemployed receiving Newstart	98%	Australian Bureau of Statistics
Incarceration		
Incarceration rate pre-program	13%	Dardi Munwurro program data
Incarceration rate post-program	4%	Dardi Munwurro program data
Annual operating expenses of incarceration per prisoner (ex. capital costs)	\$92,202	Productivity Commission
Recidivism rate	78%	Australian Bureau of Statistics
Two-year recidivism rate	46%	Productivity Commission
Median time expected to serve	24 months	Australian Bureau of Statistics
Community Correction Orders		
CCO rate pre-program	75%	Dardi Munwurro program data
CCO rate post-program	2%	Dardi Munwurro program data
Annual cost of CCO per offender	16,530	Productivity Commission
Two-year reoffending rate	15%	Productivity Commission
Median time of order	18 months	Sentencing Advisory Council
Costs		
2018-19 program delivery costs	\$1,832,361	Dardi Munwurro administrative data

Input	Value	Source
General		
Number of participants successfully completing program in 2019	224	Dardi Munwurro administrative data
Benefits erosion period	3 years, 5 years, 7 years	Deloitte Access Economics
Discount rate	3%, 7%, 10%	Deloitte Access Economics

Source: As shown in table.

3.3 Results

The results of the cost-benefit analysis are summarised in Table 3.2. Given the uncertainty surrounding the benefits erosion period, the results should be interpreted as a range. Using the mid-range discount period (7%), the BCR of the Dardi Munwurro men's healing programs is estimated to range from 1.50-2.90. Thus, each dollar invested into Dardi Munwurro is estimated to provide a return on investment of 50%-190%.

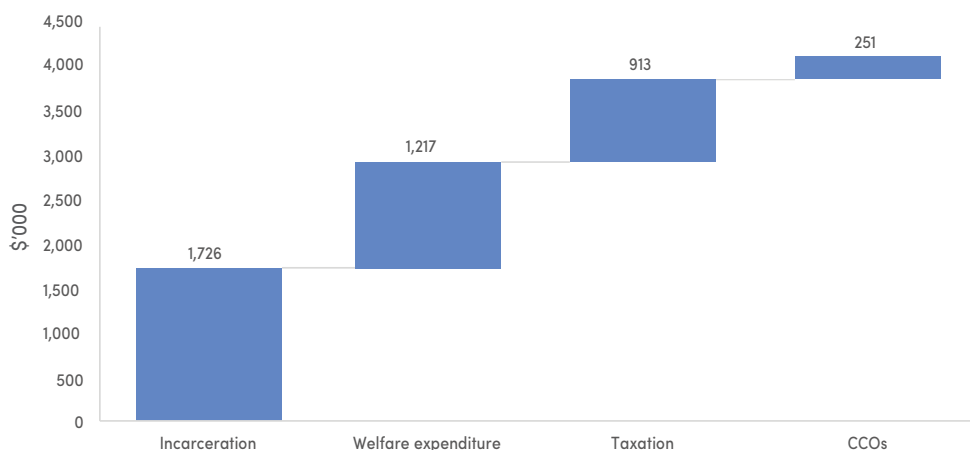
Table 3.2 Summary of results (7% discount rate)

	Benefits erosion period		
	3 years	5 years	7 years
Benefits (\$'000)	\$2,751	\$4,107	\$5,315
Costs (\$'000)	\$1,832	\$1,832	\$1,832
BCR	1.50	2.24	2.90
Return on investment	50%	124%	190%

Source: Deloitte Access Economics analysis

The largest stream of benefits delivered by the Dardi Munwurro programs are through the reduced rates of incarceration. This result is to be expected, given that the rate of incarceration decreased from 13% to 4%, and that each avoided case of incarceration represents an annual saving to government of more than \$90,000 per annum. The next-largest areas of benefits related to reduced welfare expenditure and increased tax revenue. The smallest area of benefits arose from fewer CCOs. This area of benefits was the smallest, given the relatively lower cost of CCOs compared to incarceration, and that underlying rates of reoffending are lower for CCO recipients compared to people who are incarcerated. The incremental benefits delivered from each stream are shown in Chart 3.1.

Chart 3.1 Total benefits by type (five-year benefits erosion, 7% discount rate)



Source: Deloitte Access Economics analysis

A sensitivity analysis was performed by varying the discount rate used to calculate the present value of benefits. Table 3.3 presents the results of this analysis.

Table 3.3 BCR sensitivity analysis

Discount rate	Benefits erosion period		
	3 years	5 years	7 years
3%	1.67	2.55	3.37
7%	1.50	2.24	2.90
10%	1.39	2.04	2.61

Source: Deloitte Access Economics analysis

As shown in the table, results from the BCR range from 1.39 through to 3.37. These should be interpreted as plausible upper and lower bounds for the return on the program. These results demonstrate that the Dardi Munwurro program returns a positive result even under the most conservative scenario. Further, as discussed previously, not all benefits from the program were able to be captured and so the benefits included in the analysis should be viewed as a conservative estimate.

The benefits erosion period has a significant impact on the overall BCR of the program. It is recommended that Dardi Munwurro consider capturing longitudinal data on its participants following their completion of the program, to enable the benefits erosion period to be identified more precisely.

4.0 Next steps

The analysis presented in this report demonstrates the clear benefits from investment in Dardi Munwurro's men's healing programs and contributes to the evidence base for the efficacy of Aboriginal and Torres Strait Islander men's healing programs more generally. The report discusses the benefits to Dardi Munwurro program participants in terms of improving their connection to culture, restoration of identity, and strengthening relationships with family and community. The cost-benefit analysis quantifies the magnitude of the return on investment in the program – between 50% and 190%, depending on assumptions – as a result of increased employment, and reduced spending on the justice system.

However, the nature of the data available for the project has meant that the cost-benefit analysis is necessarily limited in nature and represents a conservative estimate of the benefits. Further, uncertainty regarding a key model parameter – the length of time that benefits persist for, referred to in the report as the benefits erosion period – means that the benefits from the program are presented as a range.

It is important to note that deficiencies in the data available for the analysis are not unique to Dardi Munwurro. A review of the available evidence indicates that there is no prior work that has established the economic benefits associated with men's healing programs, and that this report is the first of its kind to be undertaken. Further, Dardi Munwurro were able to retrospectively gather sufficient data on client outcomes to enable the cost-benefit analysis to be undertaken.

However, future data collection efforts would enable a more comprehensive assessment of benefits, with less uncertainty in the analysis. This additional data collection includes widening the scope of data that is collected across each of the programs and capturing longitudinal data on participant outcomes after they have completed the program.

Key to estimating the economic benefits from men's healing programs is capturing client data prior to commencing the program, during the program, at completion of the program, and then at regular intervals after program completion. The data captured at each of these points should be recorded for a consistent set of variables, to enable the analysis to demonstrate the impact that the program has had on achieving outcomes. The type of data that is captured should be closely linked to program outcomes and satisfy one or both of the following criteria.

Outcomes that can be monetised – to be included in a cost-benefit analysis, benefits need to be specified in monetary units, so that they can be compared to costs. For example, this report relies on data that specifies the proportion of program participants who were incarcerated in the six months prior to commencing the program, and the proportion of participants who were incarcerated following the program. Improvement in this outcome can be readily monetised by estimating the costs that are avoided through having fewer people incarcerated. Across Dardi Munwurro's programs, additional examples of monetisable outcomes for which data could be collected include:

- Improvements in mental health can be assessed by comparing the prevalence and/or severity of conditions, such as anxiety and depression pre-program and post-program, to identify the impact that the program has had on improving client mental health. These improvements can be readily monetised by applying an estimated cost per case of depression or anxiety that is removed (or reduced) due to the program, through using existing literature that places a monetary cost on these mental health conditions. Standard scales, such as the Beck Depression Inventory, are widely used by clinicians in diagnosing the manifestation and severity of depression.

- Data can be collected from participants on their use of health services prior to commencing the program, and after completing the program, to identify whether the program has successfully reduced costs to the health system by improving the mental, physical, and spiritual health of participants. However, it is more likely that use of health services would increase in the short-term, and improve long-term health outcomes, which should be the primary measure. For example, it may be the case that a participant takes more responsibility for their health through their participation in the program, and so engages with the health system at a higher rate that is more appropriate for their needs. Thus, an appropriate measure to use could be participant use of hospital services – such as the number of admissions to the emergency department in the preceding year, and any associated hospital admissions – to assess whether the program has been successful in reducing health system expenditure. In the long term, examining health outcomes would provide a better indication of the impact of accessing health services.
- Living conditions can have a significant impact on health outcomes. Dardi Munwurro collects information on the living arrangements of its clients, including the proportion of clients who are homeless. Unfortunately, the sample size of respondents who are homeless makes it difficult to reliably attribute benefits to a reduction in the rate of homelessness. However, the rate of participants living in overcrowded housing is likely to be higher, with approximately 1 in 5 Aboriginal and Torres Strait Islander people living in overcrowded housing. Thus, it is likely that there would be a sufficient sample for establishing benefits. It would be useful to collect data on the proportion of clients who are living in overcrowded housing, and whether this improves due to program participation. Improvements in the rate at which clients live in overcrowded housing can be readily monetised through reductions in the rate of domestic violence and other health outcomes.⁵⁴

Achievement of outcomes using a standardised scale – there are many standardised scales that can be used to assess client progress towards achieving outcomes. For example, Dardi Munwurro currently uses some standardised scales to capture improvement in outcomes, such as the *Negative Life Events Scale* and the *Aboriginal Resilience and Recovery Questionnaire*. However, no literature exists for linking achievement of outcomes on these scales with monetisable benefits. It is important that the standardised scales that can demonstrate an improvement in client outcomes can be extrapolated to calculating the monetisable benefit of achieving those outcomes. Examples of other scales that are of relevance to program outcomes, and that are monetisable using existing research, include:

- The Indigenous Risk Impact Screen is a validated, culturally appropriate tool for use with Aboriginal and Torres Strait Islander peoples.⁵⁵ As it is a validated tool, it can be used to assess when alcohol consumption is higher than optimal, and this can be reliably linked to an increased risk of associated health conditions, such as cancer, obesity, and liver disease.⁵⁶ The costs of these health conditions can then be monetised.
- The Kessler K10 scale is a 10-question survey regarding symptoms of depression and anxiety, which can be linked with changes in the severity of depression and anxiety.⁵⁷ A large body of evidence has linked changes in survey responses with changes in the severity of depression and anxiety. These changes can then be monetised using methods that place a monetary value on quality of life, or that link reduced severity with other positive benefits, such as increased productivity or reduced health system spending on these conditions.

54 Havnen O 2012, *Remote Services Report 2011-12*, Office of the NT Coordinator-General for Remote Services Report, Darwin.

55 Centre for Alcohol and Other Drug Training and Workforce Development. 2019, IRIS Screening Instrument and Risk Card, <https://insight.qld.edu.au/shop/iris-screening-instrument-and-risk-card>, accessed October 2020.

56 Schlesinger, C. M., Ober, C., McCarthy, M. M., Watson, J. D., & Seinen, A. (2007). The development and validation of the Indigenous Risk Impact Screen (IRIS): a 13-item screening instrument for alcohol and drug and mental health risk. *Drug and Alcohol review*, 26(2), 109-117.

57 *Beyond Blue. Anxiety and depression checklist (K10)*, <https://www.beyondblue.org.au/the-facts/anxiety-and-depression-checklist-k10>, accessed October 2020.

The 36-item Short Form Survey (SF-36)⁵⁸ provides a quality-of-life measure that can be applied across all aspects of Dardi Munwurro's programs to assess changes in participant quality of life. It asks a range of questions relating to health, activities of daily living, work impediments, emotional problems, and the impact that any health and emotional problems have on interactions with friends and family. A large body of evidence links changes on this scale with changes in quality-adjusted life years, which can then be monetised using standard health economics techniques.

In collecting additional data and monetising new areas of benefits, it is important that benefits not be double counted. For example, the report estimates the benefits from an increase in the rate of employment. Going forward, if data is collected that enables the benefits from reduced severity of depression to be calculated, care should be taken to not attribute *additional* employment gains that would flow from this improvement. Benefits from the reduced severity of depression would need to be limited to additional areas, such as improved quality of life.

The benefits erosion range used in this report is evidence-based and consistent with prior methodologies adopted by Deloitte Access Economics, and it is necessary due to a lack of longitudinal data on participant outcomes. Capturing longitudinal data, in addition to capturing data that satisfies one or both of the conditions above, will enable the benefits erosion period to be more accurately estimated and remove uncertainty regarding this component of the analysis.

Further, capturing longitudinal data will enable additional aspects of benefits to be estimated. For example, data is available from the NJP program regarding the proportion of participants who abstain from alcohol during the program. While abstinence from alcohol will confer health benefits, this record of abstinence is only available for the duration of the program. As such, the value of any health benefits is limited to the period for which abstinence is sustained, and so any monetisable benefits that are estimated solely for the period for which data is available are likely to be very small.

It is important to note that capturing longitudinal data represents additional administrative burden on program administrators, and as time passes a greater proportion of past clients will drop out of the data set. As such, it is important that all clients who complete the program be invited to take part in longitudinal surveys, and consideration be given to adopting data collection methods that will maximise the response rates to future surveys.

⁵⁸ RAND Healthcare. 36-item Short Form Survey, https://www.rand.org/health-care/surveys_tools/mos/36-item-short-form.html, accessed October 2020.







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