

Cultural adaptation of the Go4Fun® program for delivery with Aboriginal communities in NSW

# REPORT





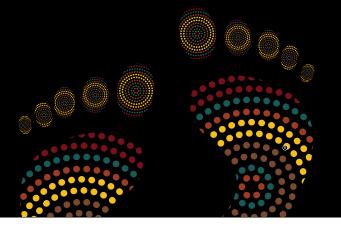


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# **EXECUTIVE SUMMARY**



Go4Fun® is an evidence-based, targeted obesity treatment program that aims to improve the health, fitness and self-esteem of children aged 7 to 13 who are above a healthy weight and their families.

The mainstream Go4Fun® program has been shown to be effective in Aboriginal communities, and has already reached significant numbers of Aboriginal people. But the consensus amongst key stakeholders was that more can be done to improve participation and outcomes. In response to this, the NSW Office of Preventive Health consulted with Local Health Districts (LHDs) already delivering Go4Fun® programs to Aboriginal communities, and formed an Aboriginal Go4Fun® Advisory Group to provide strategic advice. There was strong consensus that the mainstream Go4Fun® program would benefit from cultural modifications to the content and program delivery model. The cultural adaptation of Go4Fun® was therefore commissioned, with an Aboriginal consultancy engaged (Monaghan Consulting) along with input from Aboriginal stakeholders, LHDs and the statewide centralised service provider (the Better Health Company).

The subsequent cultural adaptations included consideration of local decision-making, the involvement of Aboriginal organisations in coordination and delivery, taking a more family-based approach, participant recruitment strategies, consideration of venues, delivery style, logistical issues and funding enhancements to support the revised program delivery model. Changes to program content and resources included consideration of the overall approach, addition of specific Aboriginal content, an increased focus on experiential learning and greater focus on peer discussion and reflection, culturally appropriate language and culturally appropriate presentation and design. Changes to personnel recruitment,

training and support included the introduction of an Aboriginal Leader position, revised training model and materials, co-facilitation of the training by the Aboriginal consultants, enhanced leader support and increased resourcing for staff time.

A small pre-pilot of the revised program was undertaken in late 2015 with four Aboriginal communities. Data from the 42 children recruited by three of these sites were available for analysis. Though caution is required in interpreting the results from this relatively small sample, they indicated a positive effect. The children had health risks and risk behaviours that were more pronounced at baseline than mainstream Go4Fun® participants, such as lower baseline physical activity and higher consumption of sugar sweetened drinks. By program end, children showed positive improvements related to physical activity, sedentary behaviour, nutrition (in particular sweet drink consumption) and self-esteem. Many such improvements were at a scale greater than that seen in the mainstream program and warrants further research to obtain more meaningful results.

Feedback from participants, families, staff and stakeholders was also generally positive. The cultural adaptation of the program was well-received, though a number of issues were raised including the complexity and amount of program content, the impact of including children outside the usual program scope, issues related to leader recruitment, retention and support, and logistical concerns such as inadequate lead-in time. Nonetheless, there was strong support for this process to continue.

Further cultural adaptations of the program content and delivery model are recommended. A more thorough, full pilot study is then recommended to fully understand the potential benefits. This process has been the first, important step in ensuring that a culturally adapted Go4Fun® program can provide the best possible outcomes for Aboriginal children and their families.

# INTRODUCTION

NSW Premier's Priority to reduce overweight and obesity rates by



by 2025

Go4Fun® is a targeted obesity treatment program (secondary prevention) that aims to improve the health, fitness and self-esteem of children aged 7 to 13 who are above a healthy weight and their families.

Go4Fun® is an important initiative of the *NSW* Healthy Eating and Active Living Strategy: Preventing overweight and obesity in *NSW 2013-2018*<sup>1</sup>, and the NSW Premier's Priority (identified in September 2015) to reduce overweight and obesity rates by 5% by 2025<sup>2</sup>.

The evidence-based<sup>3-5</sup> Go4Fun® program is based on the MEND program (Mind, Exercise, Nutrition... Do it!) originally developed in the United Kingdom. It has since been translated as a community-based program for the Australian context. Go4Fun® is multi-disciplinary and incorporates family involvement, practical education in nutrition and diet, increasing physical activity and behaviour change<sup>6</sup>. Go4Fun<sup>®</sup> is funded by the NSW Ministry of Health (MOH), managed state-wide by the NSW Office of Preventive Health (NSW OPH) and implemented locally by health promotion teams within each Local Health District (LHD). A statewide centralised service provider is funded to provide program infrastructure, resources, reporting and program delivery support (the Better Health Company/BHC).

Since the program was launched in 2009, the NSW MOH has made continued investments to evaluate and improve the program. For example, a cluster-randomised controlled trial conducted from July 2013 - March 2014 compared the effectiveness of once per week (OPW) program delivery with the twice per week (TPW) delivery model<sup>7</sup>. The study concluded that Go4Fun® can be delivered OPW with no compromise to health or behavioural outcomes. As a result, the standard mode of delivery has been OPW across NSW since October 2014.

The NSW OPH also conducted a process evaluation that aimed to describe the characteristics and reach of children participating in programs<sup>5</sup>. This is important as the program has an equity focus with prioritisation for delivery within socially disadvantaged communities to ensure that the needs of those most at risk of chronic disease are addressed<sup>1</sup>. Priority communities include people from low socioeconomic backgrounds, Aboriginal communities, people from culturally and linguistically diverse (CALD) backgrounds and families living in regional and rural areas. The evaluation determined that the program has successfully reached overweight/obese children at socioeconomic disadvantage, with over threequarters of participants being from the lowest three SEIFA<sup>i</sup> quintiles.

However, the process evaluation also revealed that Aboriginal children were less likely than non-Aboriginal children to complete the program<sup>5</sup>. Whilst these data represent the period when the TPW delivery model was being implemented (2009 - 2012), the issue of program completion still requires attention to ensure maximum uptake and benefit from the program for this important target group. Overweight and obesity are more common in Aboriginal communities than the rest of the population. Combined with a shorter life expectancy, overweight and obesity contributes significantly to the burden of disease of Aboriginal people<sup>1,8</sup>.

Results from routine program monitoring of the mainstream Go4Fun® program are positive. Aboriginal families represent 9% of all Go4Fun® participants to date (as compared to being 2.5% of the NSW population®). Routine program evaluation (see more detail later in Table 2, page 19) has indicated positive weight and weight-related outcomes for Aboriginal participants, including improvements in Body Mass Index (BMI), dietary habits, levels of physical activity and self-esteem. It is clear that Go4Fun® has the potential to be effective in Aboriginal communities. Strategies are now required to ensure that the best possible outcomes are being achieved for Aboriginal children and their families.

In 2014, the NSW OPH commenced a process to improve the program design, access and outcomes for Aboriginal children and families. Formal consultations were undertaken with four LHDs already delivering and locally tailoring Go4Fun® programs in Aboriginal communities. An Aboriginal Go4Fun® Advisory Group was formed in November 2014 to provide strategic advice to the NSW OPH. There was strong consensus that the existing Go4Fun® program is suitable for Aboriginal children and families, but would benefit from cultural modifications to the content and resources, a more flexible delivery model and enhanced leader support to improve engagement and retention of participants.

In 2015, the NSW OPH commissioned a cultural review and adaptation of Go4Fun® program content, leader training, leader support and the delivery model with the intent of producing a culturally adapted version of the program for Aboriginal children and families. An Aboriginal consultancy (Monaghan Consulting) was engaged through an open tender process to conduct the cultural review and adaptation of the Go4Fun® program in consultation with Aboriginal stakeholders, LHDs, the state-wide centralised service provider (BHC) and the NSW OPH. The consultancy was also responsible for coordinating and evaluating a small pre-pilot of the revised program in Term 4, 2015. The aim of the pre-pilot was to evaluate the acceptability and feasibility of the culturally adapted program with four Aboriginal communities (two metropolitan and two regional) in NSW.



<sup>&</sup>lt;sup>1</sup> SEIFA refers to Socio-Economic Indexes for Areas, a measure developed by the Australian Bureau of Statistics to describe relative socio-economic advantage and disadvantage.

# CULTURAL ADAPTATION OF THE PROGRAM

#### **PROGRAM DELIVERY**

#### The mainstream Go4Fun® program

The mainstream Go4Fun® program involves 10 weekly sessions delivered over the course of one school term. Sessions run after school, and are delivered in community venues (such as schools, community centres and leisure centres). Children are eligible for the program if they are aged between 7-13 years, are overweight or obese (≥85th BMI percentile for age and gender), and have a parent or carer who is able to attend each session.

Sessions are facilitated by a Theory Leader and a Physical Activity Leader who are trained and qualified health professionals such as dietitians, nutritionists, exercise physiologists, physiotherapists, fitness leaders and health promotion staff.

Each two-hour session begins with one hour of theory covering nutrition and health behaviour attended by children, parents and carers in a group together and facilitated by the Theory Leader. In the second hour, the children participate in a fun, game-based physical activity session led by the Physical Activity Leader whilst the parents and carers attend a facilitated discussion on behaviour change concepts and skills with the Theory Leader.

Each LHD employs a Go4Fun® Program Manager who is responsible for managing local delivery, recruiting leaders and coordinating the local marketing of the program. A range of strategies such as school newsletter promotion and clinical engagement with relevant health professionals (i.e. general practitioners) are used to recruit local families.

Pre- and post-anthropometric measurements and questionnaires assessing health behaviours and collating socio-demographic information are collected in weeks 1 and 10. The program reach and outcomes are routinely monitored by the NSW OPH.

#### Rationale for change

A number of key changes to the mainstream Go4Fun® program delivery model were recommended through the consultation process prior to the review and subsequent stakeholder consultation conducted with pilot sites. A key recommendation from the Aboriginal Go4Fun® Advisory group and confirmed through local consultation was that local programs need to have strong leadership and involvement from Aboriginal organisations. These organisations are well-placed to more effectively engage potential participants, providing better reach into Aboriginal communities and cultural endorsement of the program. Direct and highly visible involvement of Aboriginal personnel in program delivery was also strongly supported. Practical delivery and logistical issues also required attention, from transport assistance to broader family inclusion to maximise week-toweek participation. Across all of these issues, it was also recognised that the local context and needs would most likely vary greatly across the state, and flexibility within the delivery model would be essential to ensure an appropriate response.

#### Cultural adaptation of the program

This rationale for change was specifically translated as follows.

#### Local decision-making

Stakeholders provided insights to delivery methods and the importance of local decision-making. There was potential for LHDs currently coordinating the mainstream Go4Fun® program to be involved in either a lead or supporting role depending on the local infrastructure. Aboriginal Medical Services (AMSs) and other Aboriginal organisations had potential to lead or support program delivery, particularly if they had a focus on Aboriginal health and wellbeing which provided consistency with Go4Fun®. It was seen as an opportunity to create linkages between Go4Fun® and other local Aboriginal health and wellbeing initiatives, creating a "wrap-around" approach.



#### Local partnerships for delivery

Aboriginal Medical Services (AMSs), Aboriginal Education Officers (AEOs) based in schools and other Aboriginal organisations were recommended as key delivery agents who were well placed to deliver Go4Fun® in a way that effectively engages their local communities. The local partners and methods for recruiting delivery staff were expected to vary considerably across LHDs.

#### **Recruitment of Aboriginal Leaders**

A key change to the program delivery model was the recruitment of an Aboriginal Leader in addition to the Theory and Physical Activity Leaders. This was intended to ensure that the delivery of the program was culturally appropriate and to support participant engagement and program acceptability. This new role is discussed in greater detail later in this report.

#### A family-based approach

Consultation indicated that a whole family based program would encourage greater participation as a reflection of strong family values in Aboriginal communities. The mainstream Go4Fun® program is family-oriented, but focuses on a primary target group of children who are above a healthy weight. Stakeholders suggested that the culturally adapted program be inclusive of the whole family, regardless of the weight status of children. It was proposed that recruitment continue to focus on children above a healthy weight and aged 7-13 years, but also allow inclusion of children outside the target group to actively participate in sessions (such as siblings, extended family or friends outside of the target age and weight range). Adults across the extended family (such as grandparents) were also encouraged to be involved. Some stakeholders also suggested that a whole family based approach would be less likely to single out or stigmatise children who are overweight and obese.



"Stakeholders held the view that a whole family based program would encourage greater Aboriginal participation since Aboriginal communities have strong family values."

#### **Recruitment of participants**

A key rationale for this revised service model was the capacity of well-networked Aboriginal organisations to achieve better reach in terms of marketing and recruitment. Recommended strategies included leveraging off existing programs and activities, approaching Aboriginal people directly (such as contacting people from patient lists) and building strong relationships with AEOs at schools.

#### **Choice of venue**

The culturally adapted program was to be delivered in venues selected by the coordinating organisation as being convenient and acceptable to their local Aboriginal communities.

#### **Cultural adaptation of the content**

Whilst the Aboriginal Go4Fun® Advisory Group agreed that the content of the program was generally suitable for Aboriginal children and families, there were many aspects of the material warranting cultural adaptation. Key elements included modifications to language, inclusion of more visual and practical examples, and expanding even further on the mainstream program's focus on experiential learning, peer discussion and reflection<sup>10</sup>. These and other changes are described in greater detail later in this report (see next section).

#### **Cultural adaptation of delivery style**

A less formal, more conversational delivery style was strongly recommended<sup>10</sup>. Opportunities for informal adult participation such as going for a walk together (the "walk and yarn") were also suggested within the program design. These and other changes are described in greater detail later in this report (see next section).

#### Week-to-week logistical issues

Proposed strategies to improve weekly attendance and retention included staggering the distribution of program resources as incentives for parents, carers and children as a means of encouraging ongoing participation, addressing identified transport issues (such as coordination of community or other supported transport options) and consideration of additional care requirements for younger siblings so that families could participate properly in the program with less distraction. Needs were expected to vary considerably across LHDs. It was also recommended to provide a healthy snack each week. Some mainstream Go4Fun® programs provide a light snack on an informal basis. In this culturally adapted program, a healthy snack was recommended to be routine practice throughout the program, to provide an opportunity to showcase healthy food options and reinforce key messages delivered through the program content. It was also provided to ensure participants were not hungry and could therefore concentrate and participate more fully.

#### **Funding enhancements**

To ensure that all of the above recommendations could be achieved, the programs to be delivered in the pre-pilot sites received enhanced funding from the NSW OPH.



"Aboriginal communities learn more effectively through visual and practical resources that allow for experiential learning, peer discussion and reflection. This is fundamentally different to delivering theoretical concepts in a classroom setting, a conventional teaching approach used in Australia."

### PROGRAM CONTENT AND RESOURCES

#### The mainstream Go4Fun® program

The mainstream Go4Fun® program focuses on improving healthy eating habits, lifestyle behaviours, physical activity levels and confidence of participating children and families. Program content focuses on the four elements key to effective weight management: nutrition (including serving sizes, reading labels, menu planning), physical activity, behaviour change and family involvement.

The program provides resources including leader manuals, family handouts and participant resources (including a Go4Fun® branded bag, t-shirt, drink bottle and portion cup). Program training is delivered by the centralised service provider (BHC) and training components include an introductory online training course, a two-day face-to-face training program, presentation slides and delegate resources delivered throughout the training program.

#### Rationale for change

A recommendation was that the program needed to overtly look and feel as though it was specifically designed for Aboriginal communities. This naturally included aspects of the visual design but also extended to the way in which information is presented and communicated, from presentations to practical examples and activities. There was also a need to ensure better connectivity with other local programs and services addressing Aboriginal health and wellbeing, so that this would appear to be well integrated and connected to ongoing community priorities and actions.

Monaghan Consulting developed high level recommendations for change and areas for consideration reflecting the recommendations contributed by the four LHDs who participated in the formal consultation process (in 2014) and following discussions with pre-pilot site stakeholders. All changes to the content and resources that were able to be implemented within the scope of the pilot were implemented by BHC who ensured that the changes remained consistent with the program's evidence base and continued to align to a best practice health professional approach.



"The consultation process consistently identified a need to address cultural appropriateness of the program for Aboriginal families."

#### Cultural adaptation of the program

#### Overall approach

A strong focus on Aboriginal culture and identity was incorporated across the culturally adapted program content and materials. This included a greater emphasis on strengths wherever possible, such as using strengths-based language, focusing on the strengths of Aboriginal culture and limiting the discussion around children's weight with parents only. As described earlier, the content was modified to be conversational, with less dense and "text heavy" materials. Throughout the program, efforts were made to add culturally relevant examples.

#### Examples of some specific changes to content and resources included the following:

#### **Addition of specific Aboriginal content**

Culturally relevant additions included comparing bush tucker to modern diets, noting the differences in portion sizes and processed food, and reflecting on the subsequent impact on the health and wellbeing of Aboriginal people. Games and activities were modified to include more culturally appropriate examples, and the content was reviewed to ensure that it was meaningful to Aboriginal people. As in the mainstream program, references and direct links to other local programs and services addressing Aboriginal health and wellbeing were added to the Local Health Directory worksheet and provided for all families to increase awareness and access.

#### **Culturally appropriate presentation**

The overall look and feel of the program were also modified, incorporating Aboriginal art and design (see Figure 1 for examples).

Figure 1: Examples of modified resources



Go4Fum

<sup>&</sup>lt;sup>II</sup> Emma Walke and Alex Lewers collaborated to develop the artwork for Aboriginal Go4Fun®.



#### A focus on experiential learning and greater focus on peer discussion and reflection

A stronger focus on opportunities for experiential learning was highlighted as being important, although it must be noted that the mainstream Go4Fun® program is already highly experiential in nature, so some of these changes were subtle. Examples included preparing and tasting a healthy snack. There was a greater emphasis on informal and conversational styles of discussing information (such as incorporating a story-telling element). Flexibility to integrate less structured approaches was also added, as described earlier, such as setting up the room to create a "yarn circle" and inviting the adults in the second hour to go for a "walk and yarn".

#### Other revisions to content and approach

Additional content on eating healthy food on a budget was incorporated into the training. The incentives model was restructured, in an attempt to motivate attendance by staggering the distribution of program resources (such as drink bottles, backpacks and Frisbees) at key program points. Program resources were also provided for additional family members.

#### **Culturally appropriate language**

Language and terminology were modified to improve cultural appropriateness and readability. An example of this in practise was the change of wording from "un-friendly" and "friendly" food and drinks to "everyday" and "sometimes" foods and drinks.

#### **Participant resources**

Program resources were modified to create a cultural branding incorporating elements of Aboriginal art and design. The quality of resources was also considered based on stakeholder feedback. Participant t-shirts were replaced with polo-shirts and draw-string bags were replaced with a sturdier school back-pack, based upon feedback that these resources would be highly valued by Aboriginal participants. Wherever possible, BHC sourced all customised print work, t-shirts and additional resources from Aboriginal organisations.

#### **PROGRAM PERSONNEL**

#### The mainstream Go4Fun® program

Implementation of the mainstream Go4Fun® program is managed by a local Go4Fun® Program Manager who is employed directly by the LHD or third party organisation contracted by the LHD, and is supported centrally by BHC. The Go4Fun® Program Manager engages Theory and Physical Activity Leaders to deliver the program, and in some LHDs additional support leaders are also employed to help manage larger groups or groups with additional needs. Theory and Physical Activity Leaders complete two days of face-toface leader training that is delivered by the statewide centralised service provider (BHC). Prior to attending the two-day training, leaders are expected to complete a two- to three-hour online training module. The week-to-week content is well documented in the leader manuals and provides a script for leaders to follow to ensure consistency and accuracy of information delivered to families. Ongoing support for the Leaders is predominantly provided by the local Program Manager. State-wide support, customised systems and specific program and project advice is provided by BHC and the NSW OPH.



"The role of the Aboriginal Leader is to provide cultural integrity to the program."



#### Rationale for change

As described earlier, a key component of the cultural adaptation of Go4Fun® was the addition of an Aboriginal Leader in order to more effectively engage participants and ensure their continued participation. It was suggested that Aboriginal staff who have intrinsic understanding of local Aboriginal cultures and communities would add significant value to the program.

Stakeholders also recommended that the Program Managers, Theory Leaders and Physical Activity Leaders be knowledgeable and understanding of Aboriginal cultures and local communities to effectively deliver Go4Fun® to them.

The training was also examined, and recommendations made for co-facilitation by BHC and Monaghan Consulting. BHC delivered extensive content and program implementation knowledge and program expertise whilst Monaghan Consulting would bring the cultural facilitation skills and ability to apply aspects of the training to the cultural context.

#### Cultural adaptation of the program

#### The new role

The Aboriginal Leader position was described to potential applicants as "an exciting opportunity for a local Aboriginal person with strong community networks, relationships, leadership and facilitation skills". Health qualifications and experience were seen to be advantageous to the role but were not mandatory. The main responsibilities would be to:

- Establish good communications between the Go4Fun® program and local Aboriginal communities
- Advise and support non-Aboriginal program staff on Aboriginal cultural and community matters
- Co-facilitate the program sessions with the Theory and Physical Activity Leaders
- Communicate Go4Fun® key nutrition and health messages clearly to Aboriginal participants
- Assist Aboriginal participants with session activities and aspects of data collection and evaluation.

#### **Training content**

The mainstream training package was modified by BHC to reflect the changes to program content described earlier. Additional training content specific to the culturally adapted Go4Fun® program included:

- Making the content relevant to Aboriginal audiences
- Exploration of the Aboriginal themes, content examples and culturally relevant activities
- Discussion of the impacts of racism and bullying and the impact on Aboriginal people
- Maintaining the focus on experiential learning, peer support and a greater emphasis on engaging styles of learning such as modifying paper based games and activities into group discussions.

#### **Training delivery model**

The mainstream training delivery model was also modified, as feedback suggested that the prior online learning requirement may not be accessible nor appropriate for all participants. An additional half day of training was provided to provide program and health content in a face to face group based format. This increased total training duration to  $2\frac{1}{2}$  days for all delegates. Program training was co-facilitated by BHC and Monaghan Consulting. An additional networking dinner was added to provide further opportunity for relationship and team building.

#### **Enhanced leader support**

Ongoing support is important for all leaders, however is particularly important for new leaders and Aboriginal Leaders, who were all newly recruited and were the public face of the program across their local communities. Monaghan Consulting provided weekly phone based contact and some culturally appropriate support throughout the pre-pilot program implementation. In some LHDs, the local Program Manager was able to provide additional support, and the NSW OPH and BHC provided additional state-level support on an as-needed basis in relation to program content, group facilitation and project management activities.

#### Increased resourcing for staff time

The funding allocated for staff hours was increased to ensure that all training and preparation was remunerated, and to reflect an increase in the typical week-to-week tasks of the Aboriginal leaders in particular. For example, some took a more direct and time-intensive role in maintaining contact with participants to increase their program attendance. Time was also required to participate in weekly interviews that were conducted as part of the pre-pilot process evaluation.



# DELIVERY OF THE CULTURALLY ADAPTED PROGRAM



## PRE-PILOT SITES, STAFFING AND PREPARATION

Consultation between the NSW OPH, LHDs, Monaghan Consulting and BHC led to the determination of four sites for a pre-pilot (two metropolitan and two regional). These are described in Table 1. Stakeholder consultation with each pre-pilot site was used to determine the most suitable delivery method and identify the lead organisation(s) and local partners.

**Table 1: Pre-pilot sites** 

Local Health District	Delivery organisation	Personnel recruitment by	Site	Venue
Northern NSW	Bulgarr Ngaru AMS AMS		Maclean	Sports complex
Hunter New England	Awabakal AMS	AMS	Newcastle	School
Western Sydney	Western Sydney LHD & Aboriginal Education Officers	LHD	Willmot	School
Central Coast	Yerin AMS	AMS	Wyong	Sport complex

Job descriptions from the mainstream program were adapted to reflect the cultural adaptations and focus of the program for each of the existing positions, and created for the new Aboriginal Leader position. Sixteen Go4Fun® personnel (Aboriginal, Theory and Physical Activity Leaders and Program Managers) were recruited across the four sites, including a mix of previously experienced Go4Fun® personnel and others new to the role. All but two participated in the modified leader training as described earlier. One (a leader) was unable to participate but had already attended mainstream training; another (a Program Manager) was unable to participate in training due to timing issues.

Logistical delays in program commencement were experienced across all sites, notably related to challenges in arranging initial stakeholder meetings and practical issues such as obtaining the minimum level of insurance for program venues and leaders (particularly for Aboriginal leaders, many of whom did not have professional qualifications and therefore had more complex insurance issues to be addressed). This led to a subsequent reduction of the lead time for recruitment to just three weeks prior to program commencement, two of which were school holidays. Many of the potential marketing and recruitment strategies were therefore not adopted as intended, and much of the recruitment ultimately relied on simpler strategies such as word-of-mouth communication and personal networks. Some of the programs were also subsequently shortened from the 10-week delivery model to 9 or 8 weeks.



#### **PARTICIPANTS**

A total of 55 children were recruited across the four pre-pilot sites for program delivery in Term 4 (October - December) 2015. Only data for the 42 participants from Maclean, Willmot and Wyong were available at the time of writing this report. Of these, 57% were female and 43% were male, with an average age of 10 years. All but one identified as being Aboriginal or Torres Strait Islander, Inclusion was extended to children of a healthy weight and/ or outside the 7-13 age range and the BMI of all participating children was measured at baseline: 17/42 (41%) of participating children met the eligibility criteria for the mainstream Go4Fun® program, with 22/40 (55%) being outside the target BMI range (≥85th BMI percentile for age and gender) and 2/42 (5%) being outside the target age range (7-13 years). BMI data were missing for two children.

Parents and carers were invited to participate as per the program design, but a number of challenges were experienced across the pre-pilot sites. Some adults were unclear as to their expected role. Some dropped their children off, but did not stay themselves. Others did stay, but did not directly participate in the program. Others reported at the conclusion of the program that they had never received program communication explaining the process. As a result, adult participation across the pre-pilot was less than anticipated or desired and stronger participation is required in future.

## PROGRAM PARTICIPATION AND OUTCOMES

Data for the 42 children recruited for the programs delivered in Maclean, Willmot and Wyong are presented in Table 2. The sample size varies across program outcome indicators, but represents the children that completed the program and provided pre- and post-anthropometric data and completed questionnaires.

Data from mainstream Go4Fun® programs are provided for context and comparison, though the sample size of the pre-pilot is insufficient for comparative statistical analyses to be undertaken. Data are for the period from Term 3 2011 to Term 1 2015 inclusive, and are shown for all participants of mainstream Go4Fun® for this period, and for the subset of Aboriginal participants.

The relatively small sample size of the prepilot should be taken into consideration when interpreting the data. This was a small pre-pilot to explore the feasibility and acceptability of a culturally adapted version of the Go4Fun® program, and more meaningful conclusions should be drawn in the future from larger datasets.

**Table 2: Program participation and outcomes** 

	Mainstream Go4Fun® program		Culturally adapted Aboriginal Go4Fun® pre-pilot				
	All children Term 3 2011- Term 1 2015	Aboriginal children Term 3 2011- Term 1 2015	All children	Eligible children ("Eligible" as per age/BMI criteria)			
Program participation							
Recruited = registered as planning to attend	6,864	420	42	17			
Enrolled = attended ≥1 session	5,789	369	40	17			
Completed = attended ≥3 sessions if OPW or ≥6 sessions if TPW	4,966 86% of enrolled	302 82% of enrolled	31 78% of enrolled	13 76% of enrolled			
Program outcomes							
Indicator	Pre → Post	Pre → Post	Pre → Post	Pre → Post			
(group average)	Difference	Difference	Difference	Difference			
BMI (kg/m²)	25.6 → 25.0	25.9 → 25.1	21.1 → 21.2	27.0 → 27.1			
	- <b>0.6</b> ▲	- <b>0.8</b> ▲	<b>0.1 ▼</b>	<b>0.1</b> ▼			
Waist circumference (cm)	83.6 → 82.1	84.7 → 83.2	74.3 → 74.2	87.2 → 86.6			
	<b>- 1.5 ▲</b>	- <b>1.6</b> ▲	- <b>0.1</b> ▲	- <b>0.6</b> ▲			
Recovery heart rate (beats/minute)	113.0 → 108.1	110.9 → 102.5	114.7 → 112.0	127.3 → 119.0			
	- <b>4.9</b> ▲	- <b>8.4</b> ▲	- <b>2.7</b> ▲	- <b>8.3</b> ▲			
Physical activity	8.6 → 12.1	10.5 → 15.2	7.1 → 15.8	1.3 → 11.1			
(hours/week)	<b>3.5 ▲</b>	<b>4.7</b> ▲	<b>8.7</b> ▲	<b>9.8</b> ▲			
Sedentary activity (hours/week)	20.5 → 17.5	19.7 → 15.5	19.8 → 8.2	19.1 → 11.0			
	- <b>2.9</b> ▲	- <b>4.2</b> ▲	- <b>11.6</b> ▲	- <b>8.1</b> ▲			
Fruit serves	1.7 → 1.9	1.8 → 2.0	1.5 → 1.4	1.3 → 1.4			
(per day)	<b>0.3 ▲</b>	<b>0.2</b> ▲	- <b>0.1 ▼</b>	<b>0.1</b> ▲			
Vegetable serves	1.3 → 2.0	1.4 → 2.1	1.2 → 1.5	1.1 → 1.4			
(per day)	<b>0.6</b> ▲	<b>0.7</b> ▲	<b>0.3</b> ▲	<b>0.3</b> ▲			
Sweet drinks	0.5 → 0.3	0.7 → 0.4	1.0 → 0.3	1.9 → 0.4			
(per day)	- <b>0.3</b> ▲	- <b>0.3</b> ▲	- <b>0.7</b> ▲	- <b>1.5</b> ▲			
Self-esteem scale	19.7 → 22.2	20.2 → 22.6	20.5 → 23.5	18.9 → 22.1			
(0-30)	<b>2.4 ▲</b>	<b>2.4</b> ▲	<b>3.0</b> ▲	<b>3.3</b> ▲			

lacktriangle indicates that the change occurred in a positive direction or lacktriangle negative direction

# **DISCUSSION**

#### REFLECTIONS ON CULTURAL ADAPTATION OF THE PROGRAM

The cultural adaptation of the Go4Fun® program was well-received and there is support from stakeholders, staff and participants alike for this process to continue into the future.

In the planning and development stages, key stakeholders were supportive of key concepts to improve the relevance of program content and resources. The inclusion of more culturally relevant examples, modifications to the language and achieving a look and feel that is culturally relevant and appropriate were particularly important and generally well-received. But there also is a degree of subjectivity in these concepts, and opinions around what is relevant or appropriate can vary from person to person. It is important to recognise that there is no single Aboriginal voice or opinion, and therefore that regular and ongoing feedback from Aboriginal Leaders, participants and stakeholders will help to ensure that cultural appropriateness and relevance of the program is achieved.

Leaders and Program Managers who participated in the pre-pilot were offered regular opportunities to provide feedback on the culturally adapted program through weekly phone calls with Monaghan Consulting. Parents and carers who participated in the pre-pilot were offered regular opportunities to provide feedback to leaders on a weekly basis (during the program) and through direct phone interviews with Monaghan Consulting (outside the delivery of the program). Overall, Monaghan Consulting described this feedback as being overwhelmingly positive and supportive. Positive feedback included the following.

Parents and carers appreciated the high level of cultural safety which was primarily attributed to the employment of Aboriginal Leaders who demonstrated an intrinsic understanding of their local Aboriginal communities and were able to facilitate a grassroots approach to program delivery.

- Aboriginal Leaders were seen as being good community role models with established relationships with children and families. They were also seen as being able to more effectively manage the behaviour of the Aboriginal children. Parents and carers suggested that non-Aboriginal Leaders could benefit from further training to help them better manage child behavioural issues in the cultural context of these groups.
- Aboriginal Leaders were credited as being skilled at helping to explain program concepts in an informal way that could be easily understood by children and their families.
- Involving additional extended family members was seen as a strongly positive feature of the culturally adapted program.
- The practical, experiential focus of the program content delivered with cultural relevance was highly regarded by participating children and families. The positive feedback from families was notably related to the sessions on fats and sugar, tasting the difference between brown and white rice, learning to read food labels, the supermarket tour and discussions on bullying. Practical goals and rewards were also highly valued. This feedback is consistent with the feedback regularly received through the mainstream Go4Fun® program.

Feedback from leaders, Program Managers and participating families also highlighted areas where further improvements could be made. These included the following.

Children who were outside the age/BMI eligibility criteria were only to be accepted if they attended with a sibling/cousin who met those criteria. However this was not always implemented. With 23 of the 40 enrolled children being outside the target age and/or BMI criteria, it was suggested that at some sites this may have taken the focus away from the primary target group. Some parents and carers reported that many of these children struggled to "keep up with the fitter children" during the physical activity sessions, which may have been counter-productive to building confidence and self-esteem.

- Despite the modifications made to the program, parents and carers provided feedback that the program was still too detailed and complex.
   Some described it as being "overwhelming" at times. Staff echoed these comments in their feedback
- A number of sites experienced challenges in managing the behaviour of some of the children, particularly in the sites where adult participation was low. Some parents complained that there was frequent disruption to the sessions and that this detracted from their experience and the potential benefits of the program.
- At times, well-intentioned efforts to assist
   Aboriginal children and families to access
   the program inadvertently resulted in new
   challenges. For example, one Aboriginal Leader
   made the effort to personally collect some
   families which helped to improve parental
   engagement however large portions of the
   sessions were without an Aboriginal facilitator as
   a result.

Feedback on the cultural adaptation to the delivery of the leader training was also very positive. Training participants provided exclusively positive feedback (good/very good) regarding the trainers and the information that was provided. Positive feedback included the following.

- Leaders found the group-based nature of the training to be useful, as it enabled team and relationship-building opportunities and supportive networks to be developed.
- The dual facilitation model worked well and provided valuable program input from BHC and cultural input from Monaghan Consulting.

Feedback from participating leaders and Program Managers also highlighted areas where further improvements could be made.

- The amount of theory covered over 2.5 days was extensive and there was feedback from leaders that it was a lot to cover within the time. The training and training resources were described by Aboriginal participants as being "overwhelming" at times.
- Whilst there was a strong focus on providing training and support for Aboriginal Leaders, it was noted that more could have been done to prepare the non-Aboriginal personnel for their role in these groups. Cultural awareness training was not a mandatory pre-requisite for involvement in the pre-pilot, and there was felt to be inadequate discussion of and preparation for the issues that may arise when working with Aboriginal children and families.





#### REFLECTIONS ON DELIVERY OF THE PRE-PILOT

Although small, the pre-pilot was nonetheless a useful and informative process. Positive feedback included the following.

- The involvement of Aboriginal organisations and personnel was highly valued and provided local endorsement, support and cultural safety for both the Aboriginal staff and group participants.
- School-based Aboriginal Education Officers (AEOs) with strong community networks provided effective recruitment and parental engagement.
- The involvement of personnel from LHD mainstream Go4Fun® program teams was highly valued and was associated with smooth program delivery. Having a mix of existing, experienced leaders and new leaders was a very effective model. Mainstream Go4Fun® staff involvement in local coordination and mentoring of new leaders were both noted to be effective strategies.
- Incentives for parents and children were well received, particularly when they were provided throughout the program in a staggered fashion as an ongoing incentive to continued attendance.

Feedback from participating leaders, Program Managers and participating families also highlighted areas where further improvements could be made. These included the following.

- Program planning and delivery timelines were impeded by challenges in arranging initial stakeholder meetings and practical issues such as obtaining insurance. This effectively reduced the time available to promote groups, and meant that many of the proposed culturally-appropriate local strategies for marketing and recruitment were never implemented. In some instances, it also necessitated a shorter program delivery timeframe.
- The reduced engagement and participation of adults was noted as an issue, particularly given the intended whole-family focus of the program.
- Numerous staffing issues were noted. Experienced personnel were sought, but there was ultimately a wide variation in the skills and experience of those recruited, and more could have been done to build their capacity and confidence. For example, some newly recruited leaders expressed a desire to observe mainstream Go4Fun® sessions and network with experienced leaders prior to running their own groups. However this was not feasible within timeframes.
- Many of the Aboriginal Leaders had little experience in group facilitation, and many of the non-Aboriginal Leaders were less experienced working with Aboriginal communities. Both groups would have benefited from more culturally appropriate ongoing support throughout implementation.

- Staff turnover was also an issue. At one site, the Program Manager resigned two weeks into the 10-week program; in another, an Aboriginal Leader took unplanned leave. Many of the personnel involved found it difficult to prioritise this work, as it was often added to other, existing employment responsibilities. In such circumstances, it is often these shortterm, "one-off" projects that end up being the lowest priority. It was suggested that this may be improved by more stable, longer-term funding to promote a stronger commitment to the role in the future.
- There was consistent feedback that the survey instruments used to obtain program outcome data were too detailed; this feedback is consistent within delivery of the mainstream Go4Fun® program and is currently under review. These instruments were not completed in many instances, further reducing the already small sample sizes. As well as being an issue with the tools themselves, this was also often associated with reduced parental engagement.

#### **REFLECTIONS ON** PARTICIPATION AND **PROGRAM OUTCOMES**

Conclusions from the pre-pilot data must be made with appropriate caution, particularly given that data were only available from three out of four of the pre-pilot sites. A total of 40 children commenced the program, and less than half of these (17) were in the primary target group according to age and BMI criteria. Within these acknowledged limitations, however, the results did show promise.

A key rationale for this undertaking was to improve program completion rates, with prior process evaluation of mainstream Go4Fun® revealing that Aboriginal children were less likely than non-Aboriginal children to complete the program<sup>5</sup>. The completion rate in the pre-pilot (78% all children/76% eligible children) was lower than that seen to date in the mainstream program (86% all children/82% Aboriginal children - see Table 2). But closer examination of the data revealed marked variation across the sites. One site achieved just 25% completion, whilst another achieved 100%. The small scale of the pre-pilot makes it difficult to interpret this further, other than to highlight the fact the local issues are likely to have had a strong impact on this, and require further investigation.

The baseline data for pre-pilot participants, notably those within the eligible group, confirmed that children with substantial health risks and risk behaviours were successfully recruited into the pre-pilot groups. In terms of baseline measures (see Table 2) the eligible pre-pilot children had poorer baseline health behaviours when compared to mainstream Go4Fun® participants. In some cases, the differences in baseline behaviours were substantial - for example, eligible pre-pilot participants were less active at baseline when compared to all mainstream Go4Fun® participants (1.3 hours per week versus 8.6 hours per week respectively) and eligible pre-pilot participants were more likely to drink sweet drinks at baseline when compared to all mainstream Go4Fun® participants (1.9 serves per day versus 0.5 serves per day respectively).

By the conclusion of the pre-pilot programs, the primary target group of eligible children showed a range of improved measures on all but one indicator (BMI). The data show positive changes in physical activity, sedentary behaviour, nutrition (in particular sweet drink consumption) and selfesteem. Although this needs to be interpreted with caution, and has not been subjected to the rigour of statistical analyses due to the small sample sizes, some indicators would appear to show positive pre/post improvements that are much larger than the respective improvements in the mainstream Go4Fun® program to date (see Table 2).

These pre-pilot results are very promising. More thorough exploration is still required to fully understand the potential benefits of the culturally adapted program for both eligible and non-eligible children.

#### WHERE TO FROM HERE?

The pre-pilot of this culturally adapted program has revealed a mix of positive outcomes and challenges both predicted and unforeseen, but all within a context that has clearly demonstrated both the need for and potential benefit to Aboriginal children and their families.

Following the delivery of the training and the prepilot, BHC and Monaghan Consulting separately proposed a number of additional changes to the program design and delivery. These follow themes similar to those already discussed here: reviewing the complexity and density of program content and resources, appropriateness of language, and incorporating further opportunities for experiential learning and narrative/story-telling themes, as well as addressing issues related to training, leader recruitment and support, and program delivery logistics. Whilst the cultural adaptations made have been positively received, the consensus was that there is more to be done.

If so, it will be important to strike a balance between improving the acceptability and functionality of the program for Aboriginal children and families whilst maintaining program fidelity. Go4Fun® is evidencebased, and that evidence relates to the design, content and delivery of the mainstream program. It must be ensured that changes to that program, however well-intentioned, do not inadvertently result in a lesser-quality program with diminished potential outcomes, particularly when Aboriginal children and families are a priority for receiving the highest quality programs that can be delivered.

Recommendations for the next steps in this important process are described in Table 3.

Go4Fun® is an evidence-based program that has brought positive changes to the health and wellbeing of thousands of children across NSW. This process has been the first, important step in ensuring that the best possible outcomes will be achieved for Aboriginal children and their families.

"Further adaptations to the program will make way for increased Aboriginal participation and tangible health outcomes for Aboriginal families. which will make a direct and valuable contribution towards closing the gap in life expectancy between Aboriginal and non-Aboriginal Australians."

#### Table 3: Recommended next steps

#### Recommendations for program design

- 1. Further refine the local implementation model, most likely in the form of a co-delivery model that involves both the LHD and a local Aboriginal organisation, that is flexible and best utilises the respective strengths of each.
- 2. Further refine the program content and resources based on feedback from pre-pilot participants, leaders and stakeholders.
- Further refine the training and leader manuals based on feedback from pre-pilot participants, leaders and 3. stakeholders.
- Refine the survey instruments and methods to make them more acceptable to Aboriginal families, and to 4. ensure that high quality monitoring and evaluation data are collected.

#### **Recommendations for program**

- 5. Allow sufficient lead-in times for program planning and recruitment so that opportunities for culturallyrelevant local marketing and recruitment are realised, and such that leaders have adequate time to properly prepare for their role. This must also include adequate time for local stakeholder engagement.
- 6. Improve recruitment and retention outcomes by offering a more stable, longer-term employment arrangement that is conducive to attracting skilled and experienced personnel who can commit to and prioritise this role.
- 7. Provide more ongoing support for Aboriginal personnel throughout program implementation, including mentoring from experienced leaders from the mainstream Go4Fun® program and culturally appropriate support.
- Require all non-Aboriginal staff to complete cultural awareness training as a pre-requisite for their 8. involvement in the program, and complete training that addresses issues relevant to the delivery of the culturally adapted program.
- 9. Develop strategies to address the practical issues that were raised in the pre-pilot, such as issues related to participant transport and child behaviour management.
- Ensure that the resourcing of the culturally adapted program is adequate to address these recommendations and meet the program goals.

#### Recommendations for future implementation

11. Invest in a larger pilot study with a strong evaluation component.

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