



Sport and Recreation for Indigenous Youth in the Northern Territory:

*Scoping Research Priorities for
Health and Social Outcomes*

Sallie Cairnduff



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General inquiries about this publication should be directed to:

Cooperative Research Centre for Aboriginal and Tropical Health
PO Box 41096
CASUARINA NT 0811

ph. 08 8922 8451
fax. 08 8927 5187

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Designed by Sarah Walton, CRCATH
Edited by Jenny Brands

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Foreword

Sport has played a vital role in defining Aboriginal peoples' place in Australian society. Our peoples' sporting achievements have become myths and legends that are discussed and debated with passion every day.

Sport, however, has done much more than help establish our national identity during the time since white settlement. It has evolved to become an important 'community building tool' that can assist in addressing many of the social issues plaguing our people.

Sporting activities at the grass roots level have the potential to motivate, inspire, and forge a community spirit in the face of the ever-present scourges of poverty, unemployment, substance abuse, domestic violence, ill health and apathy.

These potential benefits have been recognised not only by Indigenous people but also Government agencies and academics.

This report is a significant move forwards towards turning that potential into a reality.

While it provides an overview of sport and recreation activities for Indigenous youth in the Northern Territory only, the findings and implications are relevant to other States/Territories and across age groups.

The report highlights that while there are a number of agencies involved with and developing sport and recreation for Indigenous people there are only limited knowledge about actual outcomes.

It is a particular concern that there is a lack of hard evidence about the supposed benefits of sport and recreation to Indigenous people because of the limited or non-existent evaluation of programs.

Despite this lack of guidance service providers are still expected to address a range of health and social issues through sport and recreation programs.

This report makes it clear that research is fundamental to the development of programs that are properly structured and developed to provide sustainable, cost-effective outcomes.

The report shows that more careful planning, inter-sectoral co-operation and resources are required if sport and recreation programs are to be an effective vehicle for delivering integrated community development programs.

We need to do far more than just recruit volunteers among interested community members and elders.

The effective delivery of sport and recreation programs requires appropriately skilled and trained personnel who can ensure programs are designed and implemented strategically to tackle broader social issues.

Indigenous communities must be more closely involved in developing and implementing sport and recreation programs so they can take "ownership" and responsibility for their success.

This involves whole of community involvement - not just the sport providers but also those community members responsible for health, police, education and welfare.

The community may recognise the potential benefits of sport and recreation programs but more importantly has to know what is needed to implement and maintain successful delivery of such programs.

Training is vital, as is hard information about the development, maintenance and management of programs.

Such an approach will help communities move away from dependency on grants to the development of sustainable programs owned and managed by themselves.

Effective programs need to be community-focused and driven with the active support of key stakeholders.

The delivery of effective programs, however, is being shackled by a knowledge gap.

We need to know what makes a community 'ready' to accept responsibility for developing and delivering sport and recreation programs.

We need to know how to nurture a community's willingness to accept this responsibility.

We need to know how to deal with potential barriers. We need to know how to create a demand within a community for effective self-managed programs rather than delivering another handout.

We need to know how to make these programs work for ourselves. We need to look at grants that are tied to the delivery of sustainable outcomes.

Instead of running a weekend sports camp we should look at training up our own sports administrators.

Carefully designed and implemented research is the key to moving forward.

The first step is to identify and test the validity and reliability of measures that may be used to gauge the outcomes of Indigenous community sport and recreation programs.

Research will allow funding agencies and service providers to be better informed and more able to identify priority needs and implement their programs.

It will also allow them to monitor the progress of programs to ensure sustainable, cost-effective outcomes are delivered in our communities.

Now is the time to move away from just identifying the problems and to start to provide realistic, evidence-based solutions to deal with the social and health issues facing Indigenous people.

Geoff Clarke
Chairman
Aboriginal and Torres Strait Islander Commission

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Sallie Cairnduff
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Acronyms

ACPO	Aboriginal Community Police Officer
AFL	Australian Football League
ASC	Australian Sports Commission
AIHW	Australian Institute of Health and Welfare
ATSIC	Aboriginal and Torres Strait Islander Commission
CDEP	Community Development Employment Program
CRCATH	Cooperative Research Centre for Aboriginal and Tropical Health
DASA	Drug and Alcohol Services Association of Alice Springs
DEETYA	Department of Employment, Education, Training and Youth Affairs
ICS DP	Indigenous Community Sport Development Program
ISDO	Indigenous Sports Development Officers
ISP	Indigenous Sport Program
ISU	Indigenous Sport Unit
NSRP	National Sport and Recreation Program
NT	Northern Territory
NTDE	Northern Territory Department of Education
NTIS	Northern Territory Institute of Sport
NTISC	Northern Territory Indigenous Sport Council
RAAASS	Remote Area Aboriginal Alcohol and other Substance Strategy
SHAPES	Sport Health and Physical Education
THS	Territory Health Services
YPSRDP	Young Persons Sport and Recreation Development Program

Definitions

Definitions for key terms in this report have been adapted from a variety of sources to reflect the different cultural context of Indigenous sport and recreation programs compared to that in most of the literature. Definitions are important for future analysis and standardisation of data. Key terms in this report include 'sport and recreation' and 'youth'.

Active Australia defines 'sport and recreation' as encompassing 'all physical activity' (Active Australia undated a). Other literature, particularly medical literature, refers to 'organised physical activity', 'sport' and 'physical inactivity/sedentariness'. If physical activity is described as a continuum, with elite athletes at one end, recreation activities generally occur at the other. Atkinson (1991) notes that a broad definition of 'recreation' is needed when referring to the concept of 'recreation and leisure' in Indigenous communities. An evaluation of ATSIC-funded sport and recreation programs observed that 'recreational' activities tend to be under-funded relative to sport activities due to the unclear definition of the term (University of Canberra 2000).

In light of this debate of a continuum of physical activity, 'sport and recreation' is the term used in this report to refer to all organised physical activity (by club, community council, school etc), unless otherwise stated. For example, sport and recreation activities can include inter-community competitive basketball competitions, as well as non-competitive events such as after school fishing or swimming activities organised by the community council.

This definition does not include non-physical recreational or leisure activities such as computer games, reading, etc., as these activities are beyond the scope of this project in identifying health outcomes.

For the purposes of this project, 'youth' has also been broadly defined. Indigenous remote community definitions of 'youth' can vary according to age, marital status, or ceremony status. The projects and programs discussed in this report are focused on young people, however as services to remote communities tend to rely on a 'whole of community' approach, activities can incorporate a variety of age groups.

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Executive Summary

This report identifies health and social outcomes research priorities in the Indigenous sport and recreation sector. An initiative of the Indigenous Sport Unit, Australian Sports Commission (ASC), and the Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH), the report uses the Northern Territory (NT) as a study site. Research priorities were identified by:

- conducting a literature review of national information regarding Indigenous sport and recreation programs;
- developing a map of the key agencies and sport and recreation programs in the NT; and,
- consulting with stakeholders in the NT.

The literature review revealed that most information regarding the health (physical, emotional and social) outcomes of sport and recreation in Indigenous communities centres around five areas:

1. Clinical literature - linking physical activity and the prevention of chronic diseases (including coronary heart disease, diabetes and hypertension). Chronic disease is increasingly the most significant health issue facing many Indigenous communities.
2. History of Indigenous elite athletes in Australia - this relatively large body of literature is important in outlining the social and political context of Indigenous participation in sport, although it does not demonstrate the impact of sport and recreation programs at a community level.
3. Diversionary strategies for antisocial behaviour and self harm - this emerging body of literature gained strength from the Royal Commission into Aboriginal Deaths in Custody recommendations, and has maintained momentum through the Indigenous Sport Program (ISP) administered by the Australian Sports Commission (ASC) and the Aboriginal and Torres Strait Islander Commission (ATSIC).
4. Community development literature - sport and recreation is increasingly being identified as a community development facilitation tool, and is the basis of programs such as the ISP.
5. Evaluations of sport and recreation programs - evaluations of programs in Indigenous communities tend to be anecdotal, ad hoc, and primarily financial acquittals. There is clearly a need for more documentation of sport and recreation programs implemented in remote Indigenous communities Australia-wide, and an in-depth analysis of the impact of programs on health and social outcomes.

After conducting the literature review, a descriptive map of key agencies in the NT was compiled. The NT was chosen as the study site due to the proportionately high Indigenous population, the relatively high increase in Indigenous Sports Development Officers, and the manageable number of service providers and funding bodies. The mapping process emphasised the multi-sectoral and multi-agency nature of sport and recreation programs. It also highlighted the need for an increased understanding across the sector of the expected outcomes and how they may complement or inhibit each other. For example, expected outcomes of programs identified by agencies included: increased Indigenous participation rates in sport and recreation activities, improved educational outcomes, improved physical and emotional health of Territorians, provision of a diversionary activity for young people and provision of employment opportunities for Indigenous people. These expected outcomes reflect the range of social, health and economic values that define the success of sport and recreation programs. While programs can potentially achieve a variety of outcomes, the mapping process identified a gap in a common understanding of what a 'successful' program should achieve.

An awareness of the objectives of communities is central to defining a successful program. It is also essential to have a good understanding of community expectations for sport and recreation programs to be appropriately utilised as a community development tool. In the Northern Territory, there is evidence of services and funding bodies consulting some communities on their needs. Greater in-depth consultation and research is required, however, given the geographic and cultural diversity of Indigenous communities.

A recurrent theme from consultations with key stakeholders was the importance of sport and recreation as a vehicle to facilitate social objectives such as improving 'community cohesion' or 'community capacity'. The literature review revealed little firm evidence of this being achieved. The primary hurdle to producing more than anecdotal evidence is the lack of appropriate 'tools' to measure stakeholder objectives.

Some funding bodies and service providers have developed their own mechanisms to monitor the performance of programs. These mechanisms, however, are perceived to be insufficient by the agencies (such as the Northern Territory Department of Sport and Recreation) to adequately inform them of the full impact of programs. Historically, the sport and recreation sector has not prioritised evaluations of Indigenous programs. Reporting has been at best ad hoc and utilised inconsistent evaluation techniques Australia-wide (University of Canberra 2000). Agencies consulted in the NT now strongly support the development of evaluation tools, and there are indications that agencies in other parts of Australia share this interest.

As well as developing indicators that reflect the health and social impact of programs, other potential research areas identified in this report include:

- economic analysis of the costs (such as program costs, facilities and equipment costs) and gains (such as reduced antisocial behaviour, reduction of chronic diseases, social value), specifically for remote Indigenous communities;
- case studies to identify factors that influence the outcomes of programs; and,
- intervention studies to document the constraints (such as remoteness and resourcing) and strengths (cultural, family, capacity of community) of implementing programs in communities, as well as measuring outcomes.

There is considerable enthusiasm within the sport and recreation sector in the NT to further explore issues relating to Indigenous youth programs. Agencies observed that there is a growing emphasis on sport and recreation programs as mechanisms to resolve a range of issues in Indigenous communities. They concluded that appropriate monitoring tools were necessary to improve and support the potential of programs.

1. Introduction

The 'Active Australia' initiative, launched in 1996, has signified the growing recognition in Australia of the importance of physical activity for a healthy life (Commonwealth Department of Health and Family Services 1998). Underpinning the Active Australia Framework is a cooperative approach within the sports and health sectors, aiming to increase participation in physical activity and to enhance service delivery.

The Active Australia Framework reflects the response of the Federal Government to prioritise physical activity and increased participation as a public health issue. This approach is based on a substantial body of international clinical evidence identifying a sedentary lifestyle as a risk factor for poor health outcomes (US Department of Health and Human Services 1996). There is also significant evidence linking physical activity and the prevention of certain chronic diseases (Blair *et al.* 1989, Hennekens and Speizer 1991, Dunn *et al.* 1999).

In the context of this national movement, there is increasing interest but less understanding of the importance of physical activity for Indigenous Australians. There are clearly health and associated economic and social benefits from increased physical activity given the high prevalence of chronic diseases (such as coronary heart disease, diabetes and hypertension) in Indigenous communities (AIHW 2000). Organised physical activity also potentially facilitates political and community outcomes, which are as significant as the physiological benefits. Anecdotal evidence suggests, for example, that the social impact of sport in terms of providing a 'centrality' to Indigenous communities is essential for their 'political and cultural survival' (Tatz 1995). There is also a perception that sport and recreation, or organised physical activity, is a valuable community development tool that will assist with improving Indigenous social and health outcomes.

The Royal Commission into Aboriginal Deaths in Custody (Johnston 1991) has been instrumental in the development of sport and recreation activities in Indigenous communities, particularly in relation to diversionary strategies for youth antisocial and harmful behaviour. The Young Persons Sport and Recreation Development Program (YPSRDP) developed as a direct outcome of the recommendations of the Royal Commission. Initiated in 1992, YPSRDP was a collaboration between the Aboriginal and Torres Strait Islander Commission (ATSIC) and the Australian Sports Commission (ASC) (ASC 1996). This program aimed to increase Indigenous participation in sport and recreation, particularly youth (Active Australia 2000a). The YPSRDP has since evolved into the Indigenous Sport Program (ISP) which is administered by the Indigenous Sport Unit at the ASC. The nation-wide strategy continues to be co-funded by the ASC and ATSIC, and incorporates a 'Community Development Pathway' and an 'Athletes Development Pathway'. Programs from these pathways include:

- Indigenous Community Sport Development Program (formerly YPSRDP) - which employs Indigenous Sport Development Officers (ISDOs) to work with each ATSIC Regional Council;
- Cross-Cultural Awareness Training - a sports specific program aiming to improve understanding and appreciation of Indigenous cultures;
- National Elite Indigenous Travel and Accommodation Assistance Program - which supports elite athletes to compete nationally and internationally; and,
- Indigenous Excellence Scholarships - which provide Indigenous athletes the opportunity to compete at an elite level.

This scoping project evolved as an initiative of the Indigenous Sport Unit (ISU) at the ASC and the Cooperative Research Centre for Aboriginal and Tropical Health (CRCATH) as a result of concerns about the lack of research and evaluations of Indigenous sport and recreation programs. The project was conducted in the Northern Territory (NT) due to the high Indigenous population relative to the total population, the manageable number of funding agencies and service providers, and the recent significant increase of ISDO's in the Territory. While the content of this project report specifically refers to the NT, many of the underlying issues raised are relevant to Indigenous communities Australia-wide, particularly northern Queensland and Western Australia.

Project Aims and Objectives

Prior to January 2001, there were four ISDO positions servicing the NT. There are now seven positions, enabling one officer to service each ATSIC region. The ISDOs work closely with ATSIC regional councils to facilitate the development of sport and recreation plans and programs, provide support to community-based officers, and promote sport and recreation at a policy level. The objective of the program is to provide sporting opportunities for Indigenous people to improve their social and physical wellbeing (ATSIC and Active Australia 2000). Specifically the program includes:

- active participation;
- skills development;
- access to facilities; and,
- development and support (ATSIC and Active Australia 2000).

The additional ISDOs provide an excellent opportunity to conduct research into the impact of sport and recreation programs in Indigenous communities.

This project is the result of an initial request by the ISU to research the health and social impact of sport and recreation programs in Indigenous communities. In order to undertake this task, it was necessary to first identify the main stakeholders in sport and recreation service delivery and elicit data on what is known regarding programs in Indigenous communities. This was achieved through a mapping process of Indigenous youth sport and recreation programs and expected outcomes, focussing on the NT. Research priority areas were then identified.

Specifically, the project objectives were to:

1. Identify past and current Indigenous youth sport and recreation interventions in the NT, including mapping of the responsible agencies.
2. Document expected outcomes of Indigenous youth sport and recreation interventions, including specific exploration of expected outcomes for youth sport and recreation workers. This activity included exploration of the reported linkages between sport and recreation and health (ie. physical, social and emotional wellbeing).
3. Undertake preliminary exploration of appropriate outcomes of youth sport and recreation programs, through consultation with key stakeholders.
4. Explore how outcomes of sport and recreation programs can be measured.

Key stakeholders for the project identified included:

- the Indigenous Sport Unit (funded by ASC and ATSIC) - key policy development and service providers at the National and Territory level;
- the NT Department of Sport and Recreation - lead agency for Active Australia in the NT, and a major funding body of community-based sport and recreation programs;
- ATSIC Regional Councils - major funding bodies for regional and community sport and recreation programs;
- Territory Health Services - lead health service provider in the Northern Territory; and,
- non-government organisations such as the NT Indigenous Sports Council, Duke of Edinburgh Award, youth centres, Indigenous Scouts, and various sport associations - primary service providers in the NT.

Methods

A full-time Darwin-based project officer was employed to conduct a literature review, consult with key stakeholders on programs across the Territory, liaise with a reference group, and develop a final project report and a research proposal for further investigations. Representatives from peak sport and recreation service providers in the NT were invited to join the reference group. The reference group provided professional guidance and contacts to the project officer.

Consultations were conducted with 18 people and 15 organisations. The consultation process was largely based in Darwin but included a field trip to Alice Springs to talk to Central Australian-based youth service and sport and recreation workers.

Project Limitations

Consultations with remote communities were not conducted due to the short time frame of the project and limited budget. The project scope included consultations with funding bodies and service providers.

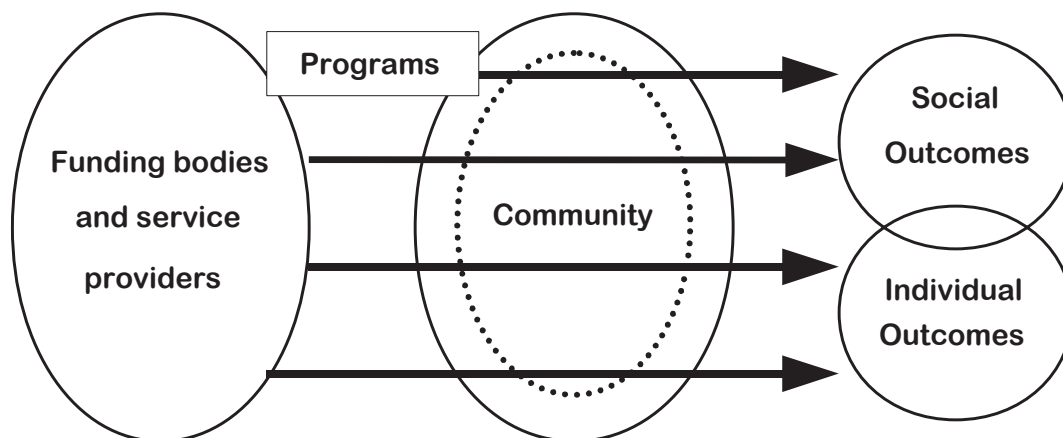
Framework

A conceptual framework was developed to assist in demonstrating the relationship between services, communities and the outcomes of sport and recreation projects and programs (Diagram 1). The framework also assists with highlighting the areas of need in terms of future research into sport and recreation and health outcomes.

There are four main components to the framework:

- funding bodies and service providers;
- social and individual outcomes;
- programs; and,
- community.

Diagram 1: Conceptual Framework



The **funding bodies and service providers** are the organisations that fund or deliver sport opportunities and recreation activities. Agencies may vary between locations, and they include Commonwealth and Territory/State government departments such as sport and recreation, health, education, local government and correctional services. Non-government services include community-based groups, youth centres, and sporting clubs and associations. In the case of Indigenous communities, ATSIC, Indigenous health organisations, other Indigenous groups and community councils also fund and/or provide services.

Service delivery is influenced by external factors such as resourcing, availability of skilled people, policy and relationships between the agency and community. Descriptive information about agencies in the Northern Territory is presented later in this report.

The objective of funding bodies and service providers is to obtain outcomes as determined by the core business of the agency. For example, a specified level of school retention is an expected outcome of sport and recreation programs delivered by educational agencies. For funding bodies and service providers, a program's 'success' is measured by the achievement of expected outcomes. Each agency may have several expected outcomes or objectives. Expected outcomes have been categorised into Individual and Social outcomes in the conceptual framework.

Individual outcomes are based on objectives that attempt to improve the physical wellbeing, emotional wellbeing, economic status, employment opportunities, self-esteem or educational attainment of the individual.

Social outcomes are often the result of longer term objectives such as increased social cohesion, reduced economic cost of ill health, and improved community capacity to utilise sport and recreation programs.

Outcomes are achieved by implementing or funding **programs**. This is the third component of the conceptual framework, and is represented in the diagram by the arrows from the funding bodies/service providers to the individual and social 'outcomes'. Evaluations and monitoring determine whether outcomes are being achieved.

The **community** is the target population that is participating in the program. For the purposes of this report, a 'community' may be defined by groupings according to age, gender, geographical location, sporting ability, ethnic status, special interest or talent.

The community is instrumental in determining the 'success' of programs and achievement of outcomes. 'Success' is a value-laden concept, and the community, funding bodies and service providers may have different expectations of a program. Some internal factors that will affect the value of a program to a community will include the interest of community members, history of the community, functioning of the community and availability of skilled people to run the program.

An important external factor affecting community participation in sport and recreation programs is resourcing and support of the program.

The conceptual framework illustrates at least two groups in the community that are affected by sport and recreation programs: active and non-active participants. Active participants are those who physically take part in the program, and are indicated by the dotted circle in the conceptual framework. Active participants can potentially obtain physiological benefits from physical activity. Non-active participants include others in the community who support the activity, eg. sports administrators, family, supporters, coaches etc. There are positive individual outcomes for non-active participants such as increased emotional wellbeing, as well as social outcomes such as increased community morale.

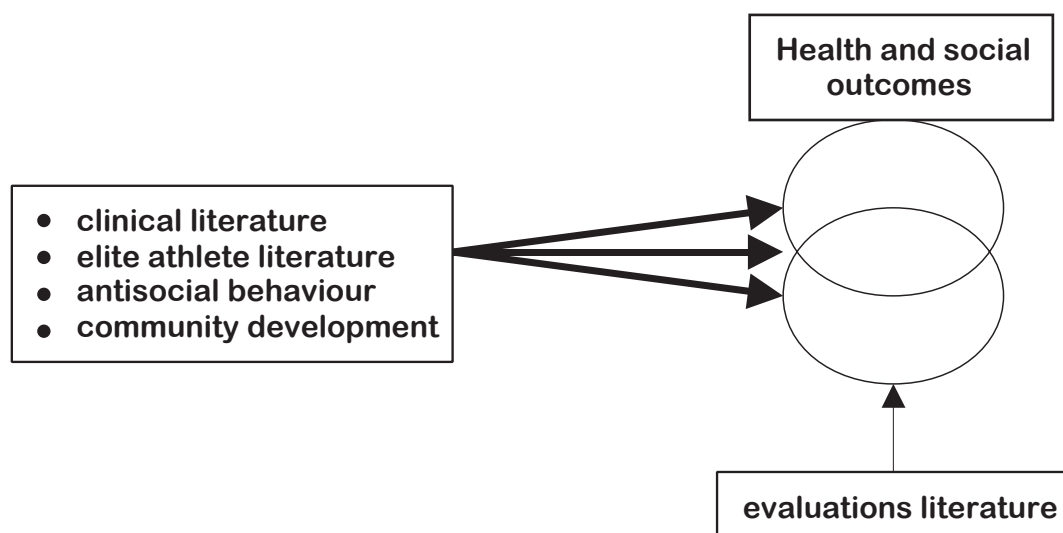
The conceptual framework described above is applicable to a range of national and local settings. In the case of this project, the framework was used to illustrate the sport and recreation sector in Indigenous communities in the NT. Through a mapping process, a description of the funding bodies and services providers in the NT, the programs and expected outcomes have been documented.

2. Background Information: A Literature Review

This section of the report outlines the literature on the social and health impacts of physical activity in Indigenous communities. For the purposes of this report, the literature has been summarised into five broad categories: clinical literature, elite athletes, antisocial behaviour, community development and evaluation of programs. The first four categories specifically focus on the literature that describes the types of outcomes from sport and recreation programs. In the conceptual framework, these have been further defined as ‘individual outcomes’ and ‘social outcomes’. Each of the categories of literature aims for a combination of individual and social outcomes.

The fifth category, evaluation of programs, reviews the literature relating to evidence showing programs achieving outcomes.

Diagram 2: Structure of Literature Review



Clinical Literature

Clinical research clearly demonstrates that physical inactivity is a health risk (US Department of Health and Human Services 1996, Smith *et al.* 1999, Dunn *et al.* 1999, Ramanathan 2000). A study conducted by McGinnis and Foege (1993) estimated that the most important factors contributing to mortality in general were tobacco, physical inactivity and diet. Medical studies increasingly reveal strong links between physical inactivity and an increased risk for the development of cardiovascular disease and diabetes (Blair *et al.* 1989, Smith *et al.* 1999, Stephenson *et al.* 2000). In 1996 the Australian Institute for Health and Welfare (AIHW) reported that physical inactivity is also associated with a range of other illnesses including hypertension, falls and depression (AIHW 1996, Mathers *et al.* 1999). A good summary of recent literature linking physical activity and health can be found in the report *Physical Activity Patterns of Australian Adults: Results of the 1999 National Physical Activity Survey* (Armstrong *et al.* 2000).

Physical activity is recommended by peak health bodies to reduce the risk of developing certain diseases, as well as modifying the impact of other risk factors. For example, a higher level of physical activity prevents cardiovascular disease (Blair *et al.* 1989), as well as reducing the impact of other risk factors such as tobacco smoking (Stephenson *et al.* 2000). The physiological benefits of physical activity are related to the amount and regularity undertaken (Dunn *et al.* 1999).

The *National Physical Guidelines for Australians* suggest that minimum levels of physical activity needed for good health include:

- utilising movement as much as possible;
- at least 30 minutes of moderate-intensity physical activity on most, or all, days; and,
- regular, vigorous exercise (Active Australia undated b).

There is increasing evidence also demonstrating the beneficial relationship between physical activity and mental well-being (US Department of Health and Human Services 1996). Sport and recreation has been shown to reduce symptoms of anxiety and depression, and improve the ability to cope with stress. Organised physical activity also promotes a feeling of belonging, increases participation in community group/club, improves social interaction and has psychological benefits (US Department of Health and Human Services 1996).

Unfortunately, there have been few studies researching the health impact of physical inactivity on Indigenous communities. It is clear, however, that chronic diseases such as ischaemic heart disease, coronary heart disease, diabetes and respiratory diseases are among the leading causes of morbidity and mortality for Indigenous people in Australia (Perkins 1993, AIHW 1996, Mathers *et al.* 1999, AIHW 2000). These diseases are also occurring at rates much higher than in non-Indigenous Australian populations (AIHW 1996, AIHW 2000).

The health risk factors associated with the higher rates of chronic diseases among Indigenous people include lower socio-economic status, poorer housing and living conditions, poorer nutritional status, and higher rates of smoking (AIHW 2000). The emergence of chronic disease is also linked with a relatively recent change to a sedentary lifestyle as Indigenous people were dispossessed of land and traditional living (Tatz 1995). There are few studies determining how changes in lifestyle have affected the amount or regularity of physical activity in remote communities apart from anecdotal evidence. It is usually assumed that Indigenous people have lower participation rates in sport and recreation activities, although participation studies are often conducted in urban settings and rarely include Indigenous status. It is therefore difficult to make comparisons between Indigenous and other Australian communities.

In contradiction to the assumption of lower participation rates, a study conducted in 1994 to assess participation patterns and levels of Tasmanian Aboriginal 'youth' (mainly under 20 years) found that 78.5% of respondents participated in sport, with 42.4% playing more than once a week (Hagan 1994). This compares with national figures for 18-24 year olds of 21.3% participating in organised sport and physical activity (Active Australia 2000b). The results of the Tasmanian study are limited in their general applicability, however, as the respondents were largely urban-based, employed and educated.

More research is needed to identify the reasons that Aboriginal people choose to participate or not participate in physical activity (Ramanathan 2000). A small study conducted in Kununurra (Davis 1984) provides some evidence about factors influencing participation rates of Indigenous 'town dwellers' and 'fringe dwellers' in particular recreation activities. Davis (1984) found that the types of organised sports chosen depended on the cost, accessibility (particularly for fringe dwellers), the types of activities undertaken by others in the community, and exposure to the sport at school. This study did not investigate participation in non-organised or traditional physical activity.

Elite Athleticism

A glimpse of the recent history of elite Indigenous sporting participation and achievements is useful, as it reflects the social and political values that have led to the contemporary environment of promoting particular sports in Indigenous communities (Hallinan 1988, Tatz 1995).

Prior to the 1940's, Indigenous people excelled (and continue to excel) in individual sports such as boxing and athletics. The book *Black Diamonds* provides a comprehensive history of elite Indigenous athletes, where accomplishments include a variety of sports ranging from darts to tennis (Tatz 1996). Since the 1940s, elite Indigenous participation has focused more on team sports, particularly the football codes (Tatz 1995, Cooke 1996). For example, recent figures iden-

tify a significantly disproportionate number of Indigenous players in the national level football codes (approximately 6% of all players) compared to the population of Indigenous people (approximately 2% of the total population) (Linnell 2000). There are various theories explaining the popularity of football in Indigenous communities, including:

- team sports are more communal and therefore more akin to the social interaction of Indigenous communities, and are more culturally appropriate;
- 'privileged' sports such as cricket are less socially accessible for Indigenous people (unlike football); and,
- team sports such as football require little or no expenses (Tatz 1987, Hallinan 1988, Tatz 1995).

Some of the appeal of football for young men lies in the potential economic gain and access to wider social mobility and acceptance (Atkinson 1991, Tatz 1995, Grimley 1996). There is less emphasis on sport as an opportunity for women and girls (Atkinson 1991).

Social access to sports has been and continues to be a significant determinant of Indigenous participation. Structural factors contribute to access, ie. some sports socially and economically exclude Indigenous people. For example, sports that require funding for equipment or facilities (such as cricket or skiing) are beyond the economic means of many living in remote Indigenous communities (Cooke 1996). In addition to economic exclusion, such sports are also perceived to be socially 'elite' and therefore not seen to be accessible to Indigenous people (Tatz 1995). Remote communities are also geographically disadvantaged in accessing particular activities such as skiing or water sports.

Accounts of negative experiences due to racism have also influenced the participation of Indigenous people in particular sports (Cooke 1996). In the book *Obstacle Race*, Tatz (1995) documents the historical treatment of Indigenous athletes, and provides some examples of racism encountered. Initiatives addressing racism in sport have only recently been put into place (Cooke 1996). Racist comments from other players and treatment of Indigenous players by some teams fans, for example, resulted in the introduction of the Australian Football League's (AFL) racial and religious vilification rule in 1995 (Tatz 1995).

A lack of strategies to attract Indigenous people has also defined Aboriginal participation in particular sports (Cooke 1996). The bureaucratic history of support is relatively recent with the initial establishment of the Aboriginal Affairs portfolio in 1969 (Paraschak 1992). In that year, the National Aboriginal Sports Foundation was established to 'encourage athletic and sporting activities among Aborigines' (Paraschak 1992). It included funding for capital and operational recreation activities. By 1979, the Foundation had developed policy directions for Indigenous sport and recreation, which included annual national sporting competitions. After the Foundation was dissolved in 1983, the responsibility for Indigenous sport and recreation moved between numerous bodies with various degrees of support, until the formation of ATSIC in 1990. ATSIC now works in partnership with ASC at a national level and has devolved a significant proportion of the funding for sport and recreation to regional councils (Paraschak 1992).

In the past few decades, some Indigenous communities have established their own sporting structures (Cooke 1996). Examples of this include the National Aboriginal Basketball Carnival held in NSW (Cooke 1996) and the annual community festivals such as the 'Yuendumu Games' (Robson 1990). At a community (non-elite) level, festivals bring extended families and communities together, and provide meaning when appropriate employment is otherwise scarce (Tatz 1995, Grimley 1996).

Garnduwa Amboorny Wirnan Aboriginal Corporation (Garnduwa) was established in 1991 to address sport and recreation needs in the Kimberley region. The primary objective is to increase participation by Kimberley people in sport and recreation activities, particularly Indigenous youth (Garnduwa undated). There is a strong emphasis on competitive sport and athlete development, such as football and basketball, as well as a 'healthy lifestyle' strategy, isolated community festivals, support for one-off programs and a relatively new initiative addressing the needs of women and girls. A recent evaluation of Garnduwa conducted by Edith Cowan University is yet to be made public.

There is some historical literature that documents 'traditional games' that were played by Aboriginal cultures (Harney 1952). The potential for further investigation and possible utilisation of existing traditional games (or other 'unique' Aboriginal activities) for encouraging physical activity is being investigated (Edwards per comm 2001).

Antisocial Behaviour, Self Harm and Physical Activity

The Royal Commission into Aboriginal Deaths in Custody highlighted the importance of organised physical activity as a prevention tool for antisocial behaviour of youths, particularly as a diversionary strategy from the criminal justice system.

Diversions activity is the most commonly suggested solution to eliminate or ease the problem of serious youth offences since it is generally implied that the root cause is a lack of constructive (or at least not harmful) outlets for youthful energy and tensions, generally described as 'boredom' (Johnston 1991: 168).

The report highlighted some of the evidence of the continual marginalisation of young Indigenous people in isolated communities. A decade after the Royal Commission, increasing evidence shows that Indigenous communities experience higher rates and worsening types of violence than non-Indigenous communities (Memmott *et al.* 2001). Compared with other Australians, Indigenous youths are more likely to be unemployed, die at a younger age, leave school earlier, spend more time in jail, and are more likely to die in custody (Johnston 1991, Bowers 1999). Given the social and geographic isolation of many communities, particularly in the Northern Territory, lack of activities precipitates boredom, low self-esteem and depression (Bowers 1999).

Organised physical activity after school hours and during school holidays are believed to significantly reduce offences (such as break-ins) and harmful activity (such as substance abuse) (Bowers 1999, Cameron and MacDougall 2000). Mason and Wilson (1988a) from the Australian Institute of Criminology have reported that organised activities, particularly sport, have contributed to a reduction in offending behaviour. Most of these programs are based on the notion that if 'desire' is removed from the 'desire + ability + opportunity = crime' equation, then long term antisocial behaviour is reduced (Hazlehurst 1990). Cameron and MacDougall (2000) have also identified 'situational crime prevention', which operates on the basis that young people are diverted from antisocial behaviour by engaging in physical activity.

'Wilderness Therapy Programs' are sometimes promoted as the last diversionary tactic before entering the criminal justice system. International experiences have found that the potential for Wilderness Therapy Programs to reduce offending behaviour is related to the length of the program, among other factors (Cameron and MacDougall 2000). Cameron and MacDougall (2000) report on 'cultural trail' camps, based on a similar model, that are being conducted in Nowra and Wallaga Lake Indigenous communities with anecdotal evidence of positive impacts in the short term.

Self harm and youth suicide is an issue that has recently emerged as a serious problem in some Aboriginal communities. Epidemiological evidence of suicide amongst Aboriginal youth is historically limited (Commonwealth Department of Health and Aged Care 1999). Since the Royal Commission into Aboriginal Deaths in Custody, however, there has been increased research into the incidence of Indigenous youth suicide. It is clear that there has been an increasing trend of youth suicides since the 1970s, and rates appear to be rising faster than their non-Indigenous counterparts (Commonwealth Department of Health and Aged Care 1999). Studies have also shown that 'high rates of substance abuse, violence, criminal offending and imprisonment' are a risk factor for suicide amongst Aboriginal youth (Commonwealth Department of Health and Aged Care 1999).

The roots of problems highlighted by the Aboriginal Deaths in Custody Report, and the disturbing evidence of increasing self harm and suicide (Commonwealth Department of Health and Aged Care 1999), are embedded in social justice issues. Sports and recreation programs are believed to be a useful tool in addressing 'upstream' political and health issues, particularly in terms of accessing youth (Johnston 1991). The Indigenous Unit of Sport and Recreation Victoria, for example, coordinates the Indigenous Role Model Program with the Department of Justice. Under this program, Koori sportspeople (such as football players) visit schools, juvenile justice centres and community organisations (Office of the Minister for Police and Emergency Services 1999). Significantly, a recent report outlining current projects aimed at preventing violence in Indigenous communities included few sport and recreation programs (Memmott *et al.* 2001).

Community Development

The Royal Commission into Aboriginal Deaths in Custody also highlighted the importance of addressing fundamental conditions of Aboriginal community life that lead to high rates of incarceration of Indigenous youth. Sport and recreation programs have been identified by a number of sources (Johnston 1991, Tatz 1995, Bowers 1999) as useful vehicles for community development activities, including diverting youth from antisocial and harmful behaviour. Programs that are community driven are particularly important for facilitating self-determination, improving youth self-esteem and developing leadership skills within communities (Johnston 1991).

Following the recommendations of the Commission, the Indigenous Sport Program developed as a community-based and community development approach to implementing sport and recreation programs. An ISP information booklet describes five youth 'better practice' models across Australia that aim to increase Indigenous youth sport and recreation participation, raise youth self-esteem and develop skills for Indigenous people to manage their own programs (ASC undated). Expected outcomes of all the programs include improved employment opportunities, improved leadership skills and a reduction in antisocial behaviour. A more detailed analysis of these programs is needed to identify where programs have succeeded in achieving these aims.

One of the programs identified in the ISP information booklet is the Community Recreation Course (ASC undated: 11). This course was originally developed in Western Australia to assist Indigenous people to become skilled in managing and implementing recreation programs in their communities. The course is now accredited and offered through the Tropical North Queensland Institute of TAFE, and includes a combination of residential training blocks in Cairns and on-the-job training with community councils. The course coordinators have identified two crucial elements for the student to obtain maximum benefit from the course:

1. Support for the student and their role from the local council and community.
2. A role model/mentor for the student who can assist and advise on a daily basis (Bell undated).

Students' progress is evaluated through residential components and meetings with the council and community. The course itself is monitored through internal TAFE reporting. A more in-depth evaluation would be useful in demonstrating the value of this course generally identified as a 'successful' program.

The focus of the ISP development strategy is to build on the capacity of communities to undertake sport and recreation programs to address a variety of social issues. There is considerable debate surrounding the concept of 'capacity'. In this context it is referring to infrastructure and skills development in the community to ensure sustainable programs and long-term health and social outcomes, such as the Cairns-based Community Recreation Course described above. NSW Health has been conducting investigations into the potential of the concept of 'capacity' and 'capacity building' in terms of the health promotion sector. Some of their analysis of the literature can be applied to the sport and recreation sector.

For example, Hawe *et al.* (2000) has identified three separate aims of capacity building, including:

1. *Health Infrastructure or service development* - ie. the necessary structures, support, skills and resources in the community.
2. *Program maintenance and sustainability* - ie. the ability for the community to continue to deliver sport and recreation programs, with minimal non-community support.
3. *Problem solving capability of organisations and communities* - ie. the ability to utilise skills developed from delivering programs to identify and address other issues within the community (adapted from Hawe *et al.* 2000).

Program sustainability is a significant issue for achieving long term benefits from sport and recreation programs. It is well documented (Dempsy 1990, Humbert 1998) that even in urban settings where programs are relatively well resourced and 'sport and recreation' is a familiar concept, program sustainability is difficult. This is primarily due to dependence on volunteers to maintain and develop programs. Other issues include access to appropriate facilities and resources, availability of professional development opportunities, and appropriate social environment (Dempsy 1990, Humbert 1998).

In terms of sustainability in Indigenous communities, the involvement of local people in program development and implementation is essential (Atkinson 1991). According to Tatz (1987), interventions need to be culturally specific, focus on group rather than individual or family programs and there needs to be identification of potential economic and social barriers to implementation. Clearly, significant barriers to sustainable programs in remote or geographically isolated communities include transport issues and access to resources such as appropriate facilities and skilled sport administrators (Tatz 1995). Atkinson (1991) also notes that organised, competitive sport is not a priority of all Aboriginal people, particularly those living in isolated areas. Atkinson emphasises the need to provide a range of recreational activities for those 'not sporting minded', and suggests that where there has been institutional separation of the sexes, separate activities might be appropriate (Atkinson 1991: 20). Central to this point is ensuring that communities' needs and expectations of sport and recreation programs are known and incorporated into programs (Tatz 1995, Davis 1984).

The literature has identified that sport and recreation programs often have expected outcomes that are much broader than individual health and emotional benefits from physical activity. 'Social outcomes', as illustrated in the conceptual framework on page 3, include outcomes such as social cohesion, improved community morale and increased ability of the community to address community issues. These concepts might be loosely termed the 'social capital' of the community as described by Putnam (cited in Ichiro *et al.* 1997). While the idea of social cohesion impacting on public health is not new (Ichiro *et al.* 1997), there is renewed interest in attempting to measure its impact. This is also the challenge for sport and recreation service providers.

Evaluating Programs

Sport and recreation programs clearly have the potential to satisfy a number of objectives of organisations and communities. Clinical evidence from studies in non-Indigenous and overseas communities show that physical activity has individual physical and emotional benefits. Less evidence is available to demonstrate the impact of sport and recreation programs, particularly in terms of 'social outcomes' such as capacity building.

Wilderness adventure programs are a significant source of information describing the impact of sport and recreation programs. For example, Outward Bound Australia is a non-profit educational organisation that utilises wilderness adventure experiences to develop a range of individual skills and has extensive experience researching and evaluating programs (Manson and Wilson 1988). A study by Hattie *et al.* (1997) found that Outward Bound courses had a positive impact on a range of individual psychological and educational indicators, including coping skills, self-confidence, time management and teamwork (Hattie *et al.* 1997). The Outward Bound program is theoretically open to all Australians, although it does not specifically address the needs of Indigenous youth. Many of the expected outcomes of this and other wilderness programs may not be relevant to Indigenous communities.

Other parts of the sport and recreation sector have less experience conducting evaluations or research, particularly relating to Indigenous communities. Evaluations of Indigenous programs that do exist tend to rely on anecdotal evidence of the impact of the program (Department of Sport and Recreation undated a). Agencies that fund activities monitor the progress of programs through internal mechanisms, often relying on the uptake (participation rates) of the program to determine its 'success'. Participation rates, however, may not reflect all the other outcomes expected by agencies, organisations and individuals.

An evaluation of ATSIC-funded sport and recreation programs, conducted in early 2000, found there were difficulties in collecting and analysing data due to inadequate and non-uniform reporting (University of Canberra 2000). Gaps in information make it problematic to systematically assess whether programs are meeting objectives, particularly as measurable objectives are not always clearly defined (University of Canberra 2000). This is an issue for all services and funding bodies within the sport and recreation sector across Australia.

A potential method of measuring the impact of sport and recreation programs is to estimate economic savings as a result of increased health, compared with the cost of the activity. A recent study, *The Cost of Illness Attributable to Physical Inactivity in Australia: A Preliminary Study* (Stephenson *et al.* 2000), is the first to measure the economic significance of physical inactivity as a health risk factor in Australia. The study estimated that there would be a savings of approximately \$3.6 million per year for every 1 percent increase in the population who became sufficiently active in terms of health care for coronary heart disease, diabetes and depressive disorders alone (Stephenson *et al.* 2000: vii). These findings correspond with similar analyses conducted elsewhere (WHO 1998, cited in Stephenson *et al.* 2000).

The Stephenson *et al.* (2000) study was conducted using national statistics, and it is inappropriate to generalise the findings to a specific group, such as the Indigenous population. It would be reasonable to assume, however, that there would be significant individual and social economic gains from increased physical activities, given the high prevalence of preventable illnesses where a sedentary lifestyle is a risk factor.

3. Sport and Recreation Programs in the NT

The literature review highlighted some of the gaps in documented knowledge of sport and recreation programs in Indigenous communities. The data presented in this section of the report is specific to the NT. The analysis of the data is relevant to a broader audience, however, as the fundamental conditions in Indigenous communities and the principles behind sport and recreation programs are similar Australia-wide. Readers from regions outside of the NT may find it useful to refer to the summary table (Table 1) and the analysis section of the report.

The following section describes the key funding agencies, service providers and programs in the NT. Key data has been summarised in Table 1 on page 22.

Government

NT Department of Sport and Recreation

The mission of the NT Department of Sport and Recreation is to 'encourage Territorians to participate in sport, recreation and physical activity' (Department of Sport and Recreation undated b). The Department is the lead agency for Active Australia in the Territory. Indigenous youth sport activities are embedded within various arms of the Department and include the Territory's Indigenous Sport Program, the Grants program, and funding for opportunities for Indigenous athletes through the NT Institute of Sport.

Indigenous Sport Program

The Indigenous Sport Program is based on the principle that sport and recreation improves self-esteem, reduces boredom and increases life expectancy (Active Australia 2000b). There are currently seven Indigenous Sports Development Officer (ISDO) positions in the NT; one attached to each of the ATSIC Regional Councils. The role of the ISDOs is to assist ATSIC Regional Councils with sport and recreation plans and their implementation, support community-based sport and recreation workers and assist with policy development. The engagement of new ISDOs also provides an opportunity to explore research possibilities in the sport and recreation sector.

Grants Program

The Industry Assistance Branch provides a source of grants to Indigenous communities to enhance service delivery of sport and recreation programs. In the financial year 1999/2000, the Department part-funded salaries for 41 community-based sport and recreation officers across the NT (Department of Sport and Recreation 2000). Grants are reviewed annually. Service providers have identified continuity, training and resourcing as some of the issues facing communities employing community-based sport and recreation officers through the grants program.

The Northern Territory Institute of Sport (NTIS)

As part of the Athlete Development Pathway of the ISP, the NTIS provides funding to support talented Indigenous athletes to compete at regional, Territory and national levels. As the objective of the NTIS is to 'accelerate the development and performance of athletes to achieve sporting excellence' (Department of Sport and Recreation 2000), the focus is on the individual, not community.

Northern Territory Department of Education (NTDE)

Almost 25% of the population of the Northern Territory is school aged, and of these, 35% are Indigenous (Northern Territory Department of Education 2000). The main objectives of the NTDE programs are to facilitate educational outcomes through the medium of physical activity, encourage student participation in regular physical activity for their physical and emotional wellbeing, and ensure students understand the value of good health (Northern Territory Board of Studies 1997). This is achieved through health and physical education classes which make up one of the eight 'key learning' areas of school curriculum.

Sport Health and Physical Education School (SHAPES) addresses service delivery of health and physical education, and School Sports NT provides support for outside school sport competition.

SHAPES

Following the Senate Inquiry into Physical and Sport Education in Schools in 1992, SHAPES was established to improve delivery of health and physical education in the NT. Professional development for teachers is provided through 'expos' on specialist issues such as disabilities, health, physical activity, mental health, and alcohol and other drugs (Northern Territory Department of Education 2000). SHAPES is also the representative organisation for the NTDE regarding physical education and health education in schools for interagency collaborations.

SHAPES does not have a policy specifically addressing service delivery to Indigenous communities.

School Sports NT

School Sports NT is part of a national program and conducts regional, Territory and inter-state sport programs for primary and secondary schools. All primary and secondary schools in the Territory are invited to participate in this program.

School Sports NT does not have a policy specifically addressing Indigenous schools.

Territory Health Services (THS)

Territory Health Services is the NT Government's health department. The mission of THS is to 'improve the health status and wellbeing of all people in the Northern Territory' (Territory Health Services 1999). THS promotes physical activity as a preventative 'whole of person' approach to maintaining good health. For example, a 'key result' area of the Preventable Chronic Disease Strategy is 'lifestyle modification' (Weeramanthri *et al.* 1999). Lifestyle modification includes smoking cessation programs, alcohol and other drugs programs, improved nutrition and physical activity programs. The Food, Nutrition and Physical Activity Unit of THS is responsible for coordinating physical activity policy, and representing THS in Active Australia. Other units within THS provide funding for specific programs in remote Aboriginal communities.

Health Promotion Incentive Funds

All program areas of THS are invited to apply for Health Promotion funds, in conjunction with an Aboriginal community or non-government organisation. Many of the activities are focused on physical activity as a vehicle to reach community members. Some past examples include:

- health education in conjunction with the Rio Tinto Kickstart football program;
- collecting and providing bush tucker;
- Timber Creek sports weekend; and,
- tree planting and dust suppression in Central Australia.

Health promotion incentive funds are used to highlight particular health issues and are usually one-off projects.

Mental Health

A component of promoting emotional and social wellbeing has included recreation and physical activity to maintain fitness (Darwin-based). This component does not specifically target young or Indigenous people.

Alcohol and Other Drugs

The Living with Alcohol Program is a Territory-wide program aimed at reducing alcohol-related harm. For example, the 'Rehydrate before you Celebrate' was a special project, which utilises sport and recreation activities as a method of reaching particular target groups (such as young men, school aged children etc) to provide education on dehydration and physiological affects of alcohol. This project followed research on the risk factors for mortality among Indigenous football players of a remote NT community (Markey 1996).

Elite sports athletes are also used as role models for promoting alcohol awareness and are taken to communities or events to attract attention to specific issues.

Tobacco Action Project

The Tobacco Action Project addresses smoking issues, with a particular focus on minors, young adults and Indigenous people. The project uses Health Promotion Incentive Funds to promote smoking awareness in communities. Funds have been used to sponsor particular teams (eg. provide uniforms etc), however the program is attempting to move towards more strategic support of sport and recreational programs.

There is increasing evidence suggesting that people quit smoking if it affects their sport (Walley 1995). THS, however, does not have a policy regarding sport and recreation activities and smoking awareness programs. If sport is used as a vehicle to attract community attention, it is usually because of an interest in sport by individual program officers. Most commonly, these activities focus on the use of well-known football players as role models.

Health Days, Health Weeks

Health days and health weeks are usually organised by the community council or health centre, with support from school and other service providers. Health professionals and sport and recreation officers are usually invited and participate in these events. Health weeks also often include a sporting event.

Correctional Services Northern Territory

Correctional Services Northern Territory is responsible for five correctional centres and community-based corrections. The aims of the service are to:

- preserve and build on the life of all Territorians; and,
- foster partnerships in Aboriginal Development (Northern Territory Correctional Services 1999).

There are three juvenile (10-17 years) institutions in the NT: Don Dale Juvenile Detention Centre, the Wildman River Wilderness Work Camp, and Alice Springs Holding Centre. The aims of the institutions are to assist with the personal development and rehabilitation of juveniles in custody (Northern Territory Correctional Services 1999).

There is no formal policy regarding sport and recreation programs, although projects may be undertaken from time to time.

Wildman River Wilderness Work Camp is a low security juvenile detention camp, with maximum capacity for 20 young men. It has been found that the work camp is appropriate for Indigenous youths from remote communities, as they respond better in a more open environment (Northern Territory Correctional Services 1999). The main focus of the camp is rehabilitation through carrying out work for Parks and Wildlife.

Police Services

There are 36 police stations in the Northern Territory, of which 24 are 'bush stations', mainly in remote Aboriginal communities (Northern Territory Police Fire and Emergency Services 2000). Bush stations are expected to be 'resourceful and independent' and are required to develop their own strategies to deal with alcohol abuse and juvenile crime (Davis 2000). Strategies are developed between the station and the community, and can include arranging Blue Light Discos and participating in, organising or coaching local sporting teams.

There is no policy directing police to be involved in sporting programs, however, as Aboriginal Community Police Officers (ACPOs) tend to be highly motivated, they are often independently involved in community teams.

NTSafe - Community Against Crime (NTsafe)

NTsafe is a strategy involving government agencies, non-government organisations and the community to prevent crime and antisocial behaviour. Expected outcomes of the strategy are:

- reduced social costs resulting from crime;
- reduced economic costs resulting from crime; and
- reduced personal costs resulting from crime (Robson 2000).

The strategy was launched in June 2000, and is still in a process of remote Indigenous community consultations to determine the specific objectives of programs under this framework. Initial consultations have revealed that communities are concerned with antisocial behaviour of youth, particularly substance abuse, and have identified sport and recreation as a diversionary tool to address youth issues (Gavin 2000).

The NTsafe Grants scheme is currently in the process of tendering for 'seeding' grants for local crime prevention initiatives, which may include sport and recreation activities (Robson 2000).

ATSIC Regional Councils

ATSIC funds sport and recreational programs at a national, regional and multi-regional level. At the national level, the Australian Sports Commission administers the Indigenous Sport Program through the Indigenous Sport Unit, and sponsors elite Indigenous athletes for national or international competition. National programs also include the Indigenous Community Sport Development Program (ICSDP) and Cross-Cultural Awareness Training.

At the regional level, ATSIC councils aim to improve access to facilities by providing capital works, sporting equipment and grants for teams and individuals to participate in sporting events. Individual councils may have more specific objectives according to their sport and recreation plans, if these exist. Regional council sport and recreation plans are often related to development of facilities, with less emphasis on facility maintenance and repairs or skills development in the community. An evaluation of ATSIC sport and recreation programs conducted in 2000 (University of Canberra) found that overall funding is inadequate to meet community needs, particularly where ATSIC funds are the primary source of funds.

One of the roles of the new ISDO positions is to assist councils to develop and implement sport and recreation plans for their region. Currently, regional ATSIC funding is used for facility development, or to 'top up' salaries of community-based sport and recreation officers. In the Northern Territory there are 7 regional councils: Jabiru, Yilli Rreung, Alice Springs, Papunya, Yapakurlangu, Garrak-Jarru and Miwatj.

The Jabiru and Yilli Rreung (Darwin area) ATSIC Regional Councils allocate funds for sport and recreation programs according to their council plan through the Northern Territory Indigenous Sports Council (NTISC) (Yilli Rreung Regional Council undated). Communities from these regions are eligible to apply for grants. Generally funds are used to assist school aged teams from remote areas to participate in Territory level competitions.

The Alice Springs and Papunya ATSIC Regional Councils tend to provide funding more for capital works (oval repairs, upgrades of sporting facilities and community halls) and equipment (water carts, buses etc) (Alice Springs Regional Council 2000, Papunya Regional Council 2000). Grants range from a few thousand dollars for uniforms or minor facility maintenance, to more than \$150 000 for the operational costs of a youth centre.

The objective of the Yapakurlangu ATSIC Regional Council sport and recreational plan is to 'encourage recreational activities that make a positive contribution to people's wellbeing' (Yapakurlangu Regional Council 2000) by diverting people from antisocial behaviour. The Yapakurlangu council provides funding to Anyinginyi Congress for the continued operation of a sports centre. Sport and recreation funds are also provided to remote areas in the region.

There is little evidence of regional evaluations of ATSIC-funded programs.

Local Government

Local Government bodies (community councils) provide funds for development and maintenance of sporting facilities, provision of buses and transport, and salary or part salary of sport and recreation officers. Community councils may also involve Community Development Employment Program (CDEP) participants in their sports and recreation programs to provide employment opportunities. For example, the Yapakurlangu ATSIC Regional Council reports that eight CDEP participants are employed in the sport and recreation program at Ali Curung (Yapakurlangu Regional Council 2000).

Department of Family and Community Services (Commonwealth Government)

In the Northern Territory, the Department of Family and Community Services provides funding to Indigenous communities for sport and recreation activities through the Outside School Hours Care program. The objective of this program is to provide resources and programs for activities for primary school aged children after school and during school holidays. A variety of activities are funded, including sport and recreation activities, depending on the sponsor. For example, some community councils use funding through the program to 'top up' salaries for community-based sport and recreation officers.

There are approximately 17 Indigenous communities obtaining funding through the Outside School Hours Care program. Many of these programs started through grants, and have recently been allocated on-going funding. A process to evaluate funded projects is currently under review.

Non-Government

Northern Territory Indigenous Sport Council (NTISC)

Across Australia, territory and state level Indigenous sporting bodies have been formed to promote and support Indigenous sports athletes. In the Northern Territory, the Northern Territory Indigenous Sport Council (NTISC) is the peak Indigenous sports organisation. The NTISC has several functions, including:

- administering the ATSIC Jabiru and Yilli Rreung (Darwin area) Regional Councils' sports and recreation funds. These funds are largely spent on providing funding for youths to represent their region at intra-Territory and state events;
- representing the ATSIC Regional Councils in policy formation and inter-governmental forums;
- providing proof of Aboriginality for athletes seeking sponsorship from the Australian Sports Commission; and,
- distributing videos, coaching manuals, journal articles etc, to interested communities and community-based Indigenous organisations across the Territory. As a component of providing resources to communities, the council also supports talented football players by providing guidance on food and nutrition, coaching etc.

The focus of NTISC is on athlete development, particularly football players. NTISC primarily supports Top End communities (Jabiru and Yilli Rreung both being Top End ATSIC Regional Councils).

Heart Foundation-NT Division

The Heart Foundation is an Australia-wide organisation, aiming to increase research about heart disease, and promote appropriate behaviour for a healthy heart. Physical activity is a key area of health development identified by the Heart Foundation. The Heart Foundation-NT Division primarily provides funding for research related to heart disease. It was also involved in producing a video Listen To Your Heart as a resource for Indigenous communities. There have been no projects specifically targeting physical activity in Indigenous communities in the NT. Communities may be involved in national campaigns such as Jump Rope For Heart, and Heart Foundation Local Government Awards. Local Government Awards are presented to local government and community initiatives that encourage healthy lifestyles (Heart Foundation 2000).

CREATE NT

CREATE NT is an Industry Training Advisory Board (ITAB) for the sport and recreation and arts sectors. In sport and recreation, CREATE NT aims to identify employment gaps in Indigenous participation in the sector, and to provide training and assistance to promote improved industry. CREATE NT has identified a lack of Indigenous involvement in sports administration, sports coaching, and officiating. CREATE NT attempts to encourage employment opportunities for Indigenous sports people in sporting clubs and organisations throughout the Territory, as well as advance the recognition and development of Indigenous sporting initiatives.

Australian Council for Health Physical Education and Recreation (ACHPER) NT

The Australian Council for Health Physical Education and Recreation (ACHPER) is a national professional association representing people who work in the areas of health, physical education, sport, community fitness, dance, movement science and recreation. ACHPER promotes healthy lifestyles for all Australians, and is committed to programs that are educational.

ACHPER NT is a small branch, founded on volunteers. In 1999, ACHPER NT researched and produced a teaching resource for health and physical education in remote Indigenous communities. This project was funded through National Professional Development Funds through the Commonwealth Department of Education, Training and Youth Affairs (DETYA).

Rio Tinto AFL Kickstart Program

In 1995, the AFL introduced a racial and religious vilification rule. Following this initiative, the league began to investigate football development in Aboriginal communities in northern Australia. The AFL Kickstart program was developed with sponsorship from Rio Tinto.

The key objectives of the Rio Tinto AFL Kickstart program are to:

- promote development programs in Northern Australia;
- increase participation in Australian Football by Indigenous athletes;
- expand football in schools throughout the northern regions; and,
- provide support for intensive training for promising players (Rio Tinto 2000).

Funding was withdrawn from the NT at the end of 2000, as Rio Tinto believed the program focussed too heavily on athlete development. Rio Tinto has continued to fund regions where the program also has a strong health component (eg. in the Kimberley region, through Garnduwa). Ngukurr AFL team in the NT continues to be sponsored by Rio Tinto.

Sport Associations

A variety of sports associations have recently begun initiatives in Indigenous communities at a national and NT level. These initiatives are often ad hoc, or at the request of a community. More recently, however, there has been a strategic approach to increase Indigenous sports participation. For example, the Northern Territory Cricket Association has increased focus on promoting cricket in Indigenous communities, following a national strategy to 'extend the cricket community to encompass the widest possible audience' (Australian Cricket Association 2000). Other sport associations increasing investment in Aboriginal communities include soccer and basketball.

Duke of Edinburgh Award (Duke's)

The Duke of Edinburgh Award is a program designed to develop the skills of young people and their capacity to contribute to their community. There are four main components to obtaining a Duke's award: community service, skills, physical recreation and expedition. The criteria for obtaining an award are based on the individual's improvement through persistence and achievement. The award aims for young people to 'develop vocational, social and general life skills, community responsibility through the service component, and awareness of the wider world... and an appreciation of the importance of a healthy lifestyle' (Duke of Edinburgh Award undated). In Victoria, the Duke's concept was adapted and promoted as the 'Koori Youth Leadership Challenge Program' in schools (ASC undated).

In the NT, the Duke of Edinburgh Award has been operating intermittently in Aboriginal communities since 1984. The program runs through community-based 'operators', usually teachers or professionals based at education centres, who facilitate the award process. Programs currently operating that access Indigenous youth include school-based programs at Nhulunbuy, Yirara College in Alice Springs, the Tiwi Islands and Jabiru. Other schools have expressed interest including Kunbarllanjnja, Wadeye and Barunga. The Duke of Edinburgh Award works with Indigenous Learning Centres and School of the Air to facilitate team building and ice-breaking exercises. The program is also a pre- and post-gaol diversionary service.

Drug and Alcohol Services Association Alice Springs (DASA)

DASA managed diversionary funding through the Remote Area Aboriginal Alcohol and other Substance Strategy (RAAASS) program until February 2001. The program provided grants to support projects on alternative activities for young people living in remote communities (Mosey *et al.* undated). The program was funded by THS and included a wide range of diversionary initiatives including bands, night lights for basketball, contributions to youth centres, bush camps and equipment such as vehicles, sports equipment and uniforms (Mosey *et al.* undated). The major focus of the programs was that they were community initiated.

Community Initiatives

As there are a broad range of community initiated projects operating at different times for different periods, this report can only capture a glimpse of some of the initiatives that are occurring in remote communities. For example, schools may organise inter-community competitions unrelated to the School Sports NT program. Some communities (such as Yuendumu and Bagot) have after school and school holiday programs. Pirlangimpi has a golf course development, and several communities have swimming pools (Ngukurr, Pirlangimpi, Kunbarllanjna, Nauiyu Nambiyu, Ltyentye Apurte, Areyonga). These activities meet with a range of success, depending on regularity of funding, the availability of skilled people within the community to maintain programs and the involvement of local people. There is very little evidence of formal evaluation of initiatives. Some of the more well known community activities are described here.

Community Festivals

Community cultural and sporting festivals are annual events that have gained popularity in the last 2 decades. While largely sporting events, cultural festivals are also an opportunity for political statements (eg. the 'Barunga Statement' which called for Aboriginal self-determination (Tatz 1987)), ceremony and traditional dancing.

One of the longest running and most well known festivals in the NT is the Yuendumu festival. Initially established by the Town Clerk during the early 1960s as a football competition between three communities, the festival is now an annual event encompassing a range of sporting and cultural activities that attracts participants for hundreds of kilometres (Robson 1990, Tatz 1987).

Youth Centres

Youth centres are funded from a variety of sources including ATSIC, Department of Sport and Recreation, THS, and the Commonwealth Government. The objective of youth centres is to primarily provide a safe place and relieve youth boredom. Youth centres are seen as a useful method of diverting young people from antisocial and harmful behaviour. Some examples of Indigenous youth centres in the Territory include:

- The Gap Youth Aboriginal Corporation - a non-profit organisation based in Alice Springs, offering a range of early intervention programs for young people and their families. The service includes social and personal development initiatives and sport and recreation activities. The program outcomes include offering a positive alternative to antisocial behaviour (Department of Sport and Recreation undated c).
- The community of Elliot established the Town Youth Centre, as it was recognised that there was a need to provide young people a space to play pool, watch videos and participate in recreational activities with a youth worker. Since the youth centre has been operating, anecdotal evidence suggests that there is reduction in the rate of juvenile crime and clinic referrals from young people (Mosey *et al.* undated).
- Tangentyere Council recently purchased the Aylta Centre in Alice Springs, which includes squash and basketball courts, television, computers and other recreational facilities. A bus is available for transport to and from the centre.
- The Daguragu Recreation Centre was constructed using bricks made by the community members. The centre has also begun night basketball as it was decided that it was too hot to play during the day (Department of Sport and Recreation undated c).

Indigenous Scouts

The Indigenous Scouts program was initiated at a national level in response to the high levels of self harm and suicide rates among Indigenous youth (Bowers 1999). The program has an educational and community development focus, specifically targeting self-esteem, leadership development and boredom (Bowers 1999). It is also intended that the program will facilitate reconciliation in the wider community.

The Tiwi Islands were initially suggested as an appropriate pilot community in the Indigenous Scouts Program Development Plan (Bowers 1999). Suggested activities included bush trips, trekking, navigation, tree planting and learning traditional hunting techniques. This project has not progressed.

Law and Order Plan

The Ali Curung sport and recreation program is a component of the Ali Curung Law and Order Plan. The Law and Order Plan is an inter-agency community-based approach to addressing law and justice issues in the community (Office of Aboriginal Development 1997). During initial consultations, 'youth issues' were identified as the third highest priority after family and community violence and alcohol related issues. The community has employed a sport and recreation officer, involved eight CDEP participants in the program and developed three- and five-year sport and recreation plans (Yapakurlangu Regional Council 2000). Some of the activities of the program include facilities development and upgrading, developing a Blue Light Disco, school holiday programs, an after school program and football and basketball competitions. One of the main objectives of the program is to reduce youth antisocial and self harm behaviour.

Table 1: A systematic summary of services in the NT

Organisation	Program	Objective	Target Group	Expected Outcomes	Policy	Evaluation
Department of Sport and Recreation		Encourage Territorians to participate in sport, recreation and physical activity				
	Indigenous Sport Program	Increase participation of Indigenous people in sport and recreation Improve Indigenous social and physical wellbeing	ATSIC regional level 7 regional councils in the NT	Social outcomes: community capacity Individual outcomes: improved self esteem, physical benefits	Yes – Indigenous focus, community development approach	Little evidence of evaluations
	Grants program	To assist the sport and recreation industry to provide well managed services	Community: funding for facilities, equipment and salaries	Social outcomes: increased participation in S&R activities		No formal evaluations, funding is reviewed annually
	NTIS (ISP)	<ul style="list-style-type: none"> support Indigenous athletes to compete at a regional level assist Indigenous athletes attempting to obtain NT or national representation through ISP scholarships assist in identifying talented Indigenous athletes 	Individual athlete development	Individual outcomes: improved performance and support of talented Indigenous athletes	Yes – with Indigenous focus	Little evidence
Northern Territory Department of Education	Physical activity - Key learning area	<ul style="list-style-type: none"> facilitate educational outcomes through physical activity encourage student participation in regular physical activity for their physical and emotional wellbeing ensure students understand the value of good health 	Primary and secondary school students	Individual outcomes: educational achievement, health benefits. Social outcomes: community wellbeing	Not specifically addressing Indigenous students	Little evidence
	School Sports NT	School Sports NT provides support for outside school sport competition	Primary and secondary school students	Improve individual educational outcomes of school aged children	Not specifically addressing Indigenous students	Little evidence
	SHAPES	Sport Health and Physical Education School (SHAPES) addresses service delivery of health and physical education in schools	Primary and secondary school students	Social outcomes: improving service delivery of sport and physical education programs	Not specifically addressing Indigenous students	4 year review in 2001
Territory Health Services		Physical activity to address public health issues				
	Health Promotion Incentive Funds	The Health Promotion Incentive Funds have two focus areas – growth and prevention projects	Community programs, intervention programs	Prevent disease	Not relating to S & R in Indigenous communities	Little evidence
	Alcohol and other drugs	<ul style="list-style-type: none"> diversion from substance misuse awareness of the dehydration effects of alcohol reduce smoking on communities 	Community focus through education and role models – sports as a vehicle	Reduce substance misuse	Not relating to S & R in Indigenous communities	Little evidence
	Mental Health	Improve mental health	Individual focus	Maintain emotional and social wellbeing		Little evidence
Correctional Services Northern Territory	Wildman River Wilderness Work Camp	Rehabilitation through works with parks and wildlife	Individual young men at risk	Individual outcomes: rehabilitation of young men Social outcomes: reduced crime	Not relating to S & R	Little evidence
Local Government		Improve access to sport and recreation facilities	Community	Social outcomes: increase community participation	Depends on community council	Little evidence
Northern Territory Police Services	Bush Stations	Reduce juvenile antisocial behaviour	Individual young people	Social outcomes: reduce crime Individual outcomes: diversion from judiciary system	Not relating to S & R	No

Organisation	Program	Objective	Target Group	Expected Outcomes	Policy	Evaluation
NTsafe		Reduce social, economic and personal costs due to crime	Community groups	Social outcomes: reduce crime	Developing	
ATSIC Regional Councils	Grants to community councils	Improve Indigenous access to sport and recreation facilities	Community councils	Social outcomes: improved participation in sport and recreation activities	Depends on councils	Financial evaluations
Northern Territory Indigenous Sports Council (NTISC)		Peak body representing Indigenous sports bodies in the NT	Focus on athlete development, particularly football players in the Top End	Individual outcomes: improved performance and support for individual athletes		No
Heart Foundation - NT Division		<ul style="list-style-type: none"> promote research about heart disease promote healthy heart behaviour 	Not in the NT	Individual outcomes, social outcomes	Program not operating in the NT	
ACHPER (NT)		Improve service delivery of professionals in physical activity sector	Community focus	Social outcomes: improved delivery of service		
CREATE NT	Aboriginal Development Officer	Increase employment opportunities for Indigenous people in the sport and recreation field	Individual focus	Individual outcomes: employment opportunities social outcomes: increased Indigenous representation in S&R sector	Yes	No
Rio Tinto AFL Kickstart Program		<ul style="list-style-type: none"> increase Indigenous participation rates in AFL provide support for promising players 	Individual athlete development	Individual outcomes: talent identification and increased participation in AFL	Yes	Little evidence
Sports Association		Increase Indigenous participation rates	Individual target identification of talented athletes	Individual outcomes: talent identification	Some associations	Little evidence
Duke of Edinburgh Award		Develop self esteem, leadership, community service and physical activity of individuals	Individual skills for strengthening community capacity	Individual outcomes: improved self esteem and skills Social outcomes: community capacity	Yes	
Community Festivals		<ul style="list-style-type: none"> boost community morale demonstrate organisational skills in communities bring family together provide opportunity for sport, dancing and ceremony 	sport and recreation activities a community focus	Social outcomes: improved community morale	n/a	n/a
Youth Centres		<ul style="list-style-type: none"> provide safe place for youth reduce youth boredom increase youth self-esteem develop youth leadership skills reduce youth antisocial behaviour 	Individual focus on youth at risk	Individual outcomes: improved self esteem, life choices Social outcomes: healthier community and future leadership	Some youth centres	Little formal evaluation of S&R programs apart from monitoring
Indigenous Scouts		<ul style="list-style-type: none"> reduce youth antisocial behaviour develop leadership skills in the community reduce youth boredom increase youth self-esteem develop youth leadership skills 	Individual focus on young men	Individual outcomes: improved self esteem, life choices Social outcomes: healthier community and future leadership	Yes	Program did not proceed
Law and Order Plan		Reduce youth antisocial and harmful behaviour	Youth in community	Individual outcomes: divert antisocial behaviour, reduce boredom	Reference to S&R	No formal evaluation – council monitors

4. Discussion

This fourth chapter discusses the data identified through the mapping process. The expectations of Indigenous communities are also explored.

Outcomes and Programs in the NT

Organisations

There are a range of organisations crossing multiple sectors that identify as service providers of sport and recreation activities. In the NT, for example, government service providers include health, education, sport and recreation, police, corrections, ATSIC and local government. There are also a host of non-government organisations as demonstrated (see Table 1).

Only a few of these organisations identify sport and recreation to be their core business. The primary funding bodies for Indigenous programs in the NT are NT Department of Sport and Recreation and ATSIC Regional Councils. Other funding bodies and services provide grant programs (eg. THS, local government), or one-off programs (eg. sport associations), contributing to the ad hoc nature of many sport and recreation activities.

At a policy level, the coordination of programs is conducted at a Territory level through the NT Department of Sport and Recreation. At an operational level, coordination is dependent on the relationship between service providers and the community, and the community council. The new ISP officers should assist in enhancing coordination of sport and recreation programs both at a policy and operational level.

Objectives

The range of objectives of sport and recreation programs is as diverse as the agencies involved. For example, the objectives of programs in the NT include: increased Indigenous participation rates, improved educational outcomes, improved physical and emotional health of Territorians, provision of a diversionary activity for young people and provision of employment opportunities for Indigenous people (see Table 1). Agencies can clearly have multiple objectives.

One of the challenges for funding bodies, service providers and communities is developing measurable objectives for sport and recreation programs. This will assist in determining whether programs have been 'successful' in achieving outcomes.

Target Group

This project report focuses on sport and recreation programs involving Indigenous youth. A limited number of agencies provide services directly to this section of the community, including: youth centres, Correctional Services, NTISC (through football), sport associations, Duke of Edinburgh Award, Indigenous Scouts, NT Department of Education and community-based sport and recreation officers (see Table 1). Other service providers adopt a 'whole of community' approach.

Some agencies utilise sports teams to access an audience that may otherwise be difficult to reach (eg. young men at football training), or may already be formed (eg. school-based programs), to deliver health education. This is a regular method used by services such as THS, where physical activity is an important policy, but not substantially funded at an operational level. Youth at correctional centres are another audience with particular needs that could potentially be addressed through specific sport and recreation programs.

A significant concern of service providers is obtaining consistency of programs within communities. Where activities are funded through grants, or are provided on a one-off basis, the potential positive benefits of programs are quickly lost. The NT Department of Sport and Recreation and ATSIC at a national and regional level are attempting to address this issue with the employment of ISDOs to assist with development of sport and recreation plans.

Expected Outcomes

The conceptual framework illustrated on page 3 describes 'social' and 'individual' outcomes. The distinction between these two concepts is at times subjective, but it is useful to distinguish the purpose of programs for identifying measurable objectives. Individual expected outcomes tend to be more easily measured than social expected outcomes. Expected outcomes of programs can include a combination of social and individual outcomes.

The aim of the ISP, for example, is to provide sporting opportunities for Indigenous people to improve their social and physical wellbeing (ATSIC and Active Australia 2000, ASC undated). The individual expected outcomes of this program are the related improvements in physical and emotional wellbeing as demonstrated by medical evidence (AIHW 1996, AIHW 2000). Potentially, these impacts can be monitored through appropriate indicators reflecting individual outcomes.

The expected social outcomes of the ISP are related to increased social cohesion, improved morale of the community, and the potential economic benefits from a healthier community (Perkins 1993, Tatz 1995). Indicators are not currently available to demonstrate this impact.

Outcomes are 'expected', as there is little evidence of investigations demonstrating that outcomes are achieved.

Individual outcomes

Of the identified agencies in the NT, expected individual outcomes of programs included: improved physical wellbeing, improved mental and emotional wellbeing, improved individual educational outcomes, rehabilitation of young men, diversion from judiciary system, improved athlete performance, employment opportunities, increased participation in sport and improved self esteem and leadership skills. Most service providers expect individual outcomes from sport and recreation programs.

The literature review clearly demonstrated the strong links between physical activity and good physiological and mental wellbeing. This link is the basis of services funded by THS, NT Department of Sport and Recreation and youth centres, where improvement of physiological wellbeing has been incorporated into the objectives and policy of the service. There is also the expectation that programs will produce individual outcomes such as reducing boredom and increasing self-esteem. There is currently little evidence available demonstrating that these objectives are being achieved.

As the largest health service provider in the NT, THS is interested in promoting sport and recreation to enhance individual health and wellbeing. For example, physical activity programs are identified as one of the strategies to prevent chronic diseases. THS is also involved in inter-agency collaborations and physical activity policy development. Sport and recreation programs, however, are not systematically funded by THS at an operational level. Short term projects are funded by grants, and are initiated on the efforts of interested individuals.

The NTDE also utilises sport and recreational programs as a tool to achieve individual educational outcomes. The issue of educational outcomes in remote Indigenous communities has recently been the subject of public debate in the NT. The 'Collins Report' highlighted deteriorating educational outcomes, poor school attendance, and community members' desire to improve the educational environment for their children (Northern Territory Department of Education 1999). There is anecdotal evidence highlighting the potential of sport and recreation activities to enhance school retention rates and other educational outcomes in remote communities. For example, Warrego School in the Barkly Region reports that school attendance and interest in school activities increased substantially when linked with a horse riding program (Baker 2000). Work in Queensland with Indigenous students has also highlighted the relationship between schools, community and sport and recreation activities (Edwards per comm 2001).

During consultations, agencies identified the potential of sport and recreation programs to develop individual skills and employment opportunities in communities. There is increasing emphasis on improving the standard and accreditation of Indigenous coaches and sports administrators to enhance the capacity of communities to operate programs sustainably. Programs delivered by organisations such as ACHPER NT, THS and SHAPES also attempt to improve service delivery and develop skills within the community to continue to deliver programs (see Table 1).

One of the concerns raised was the sustainability of programs given the high turnover of non-local community-based sport and recreation officers, and instability of salaries based on annual grant submissions.

Sport associations and organisations reported that the main objectives of their programs are to increase participation rates in their sport and to identify talented Indigenous players. Some sport organisations are following national initiatives to promote their sport in Indigenous communities (eg. NT Cricket Association, Rio Tinto AFL Kickstart program). These programs sometimes have additional objectives such as providing health education at training (eg. Rio Tinto AFL Kickstart program), although in general they are focussed on athlete development and talent identification.

Social outcomes

Sport and recreation as a community development 'tool' was one of the main themes to emerge from the literature and consultations with service providers. Education, health and corrective services sectors utilise sport and recreation programs as a vehicle to access certain sectors of the community or to facilitate social outcomes.

For example, since the Royal Commission into Aboriginal Deaths in Custody and the following recommendations, there has been a national emphasis on sport and recreational activities to reduce Indigenous youth involvement in the criminal justice system. Community-based organisations in the NT, such as youth centres, police bush stations and community councils, have identified sport and recreation programs as a means to address social outcomes related to antisocial and harmful behaviour (see Table 1). The literature review highlighted some of the evidence supporting this expectation (eg. Cameron and MacDougall 2000). An evaluation of a 12 month pilot project at Wadeye conducted by the Department of Sport and Recreation (undated a), also provides some local qualitative data suggesting a related reduction in vandalism during the life time of a sport and recreation project.

The literature suggests that the potential of sport and recreation as a tool to facilitate community development is due to the increased social cohesion derived from sport and recreational activities. Sport and recreation programs offer an opportunity to involve a range of age, sex, language and cultural groups from the community. It is expected that 'active' or 'non-active' (eg. officiating, coaching, supporting etc) participation will improve self-esteem and community morale.

The challenge is to develop appropriate tools that reflect social outcomes such as 'capacity building' and increases in 'community morale'. Longterm expected outcomes, such as 'decrease in chronic diseases' are also difficult to measure in the short term.

Policy and Evaluation

The literature review and mapping process identified sport and recreation as an important program area for Indigenous community development and individual wellbeing. There is relatively little policy development in this area, however, particularly in terms of Indigenous youth (see Table 1). The NTDE, for example, does not have a policy specifically addressing the needs of Indigenous students and physical activity. From a funding body perspective, apart from anecdotal support there is very little evidence showing that sport and recreation programs produce the outcomes that are claimed. Without formal policy, programs tend to be irregular and less strategic.

There are initiatives to coordinate an approach to sport and recreation activities in remote communities in the NT. The new ISDOs should assist with administration and implementation of these initiatives.

Few programs have formalised, regular evaluation processes. A number of reasons have been identified for this, including:

- under-resourcing of the sector to conduct research and evaluations;
- insufficient skills in the sector to conduct research and evaluations; and,
- insufficient or inappropriate evaluation tools to reflect objectives.

Funding bodies such as ATSIIC and the NT Department of Sport and Recreation have internal monitoring mechanisms that are used to examine programs. Often these mechanisms rely on financial information and participation rates. They may not adequately reflect the impact or effectiveness of the program. Apart from anecdotal evidence, there appears to be little evaluation of sport and recreation programs in the NT.

An evaluation of ATSIIC-funded sport and recreation programs conducted by the University of Canberra (2000) showed that this issue is not restricted to the NT, and that it is a problem faced throughout the sport and recreation sector Australia-wide. The study revealed that it was difficult to assess the progress of programs due to inadequate reporting procedures and inappropriate evaluation tools. Participation rates were found to be inadequate to reflect all of the objectives that programs are expected to deliver.

The Community

The 'community' is the fourth and least well known component of the conceptual framework.

Funding bodies and services provide programs that are either accepted or rejected by the community depending on a variety of factors including community involvement, cultural appropriateness, resourcing, skilled facilitators and expectations of the community. There are two core indications of acceptability of a program:

- participation rates, ie. the strength at which the program is embraced, and
- whether the program obtains expected outcomes.

A program may be successful in terms of reducing a health risk factor, for example, yet only attract a small number of participants. Alternatively, the program may attract a large number of participants, but not achieve the outcomes as set by the implementing agency.

The consultation process in the NT and the literature review revealed that there is little documentation on both evaluation of programs (ie whether programs obtain expected outcomes) or Indigenous participation rates in sport and recreation. Critically, there is also little documentation providing evidence of understanding communities' expectations of sport and recreation programs.

In the NT, the available evidence suggests youth issues are a major concern (Office of Aboriginal Development 1997) and that communities require projects which provide an immediate response to problem behaviour (Mosey *et al.* undated). The high number of community councils that apply for the small Living With Alcohol grants for diversionary activities (such as discos, bands, camps and minor repairs to sporting facilities) also suggests that communities are seeking strategies to divert youth antisocial behaviour (Markey 2000). Consultations with community-based sports and recreation officers and preliminary consultations conducted by NTsafe supports the perception that diversionary outcomes are the major expected outcomes of sport and recreation programs by community members (Robson 2000).

The Gaps

This section discusses the gaps (potential areas of research) as identified through the literature review, the mapping process and consultations with sport and recreation program providers.

There are several key areas where there is potential for future research. A major theme to emerge from consultations is that while sport and recreation programs are recognised as valuable to communities for a range of individual and social outcomes, there is a need for more firm evidence. Most of the research that is available is anecdotal. There is little research of long term impacts of sport and recreation programs, and there is very little documentation of programs in Indigenous communities. This can be illustrated in terms of the four components of the conceptual framework described at the beginning of this report.

1. Funding bodies and service providers

Funding bodies and service providers are location specific. In the NT, the mapping process showed there is a variety of agencies involved in funding or delivering sport and recreation programs to remote Indigenous communities to varying degrees. Objectives are not always clear and measurable. A similar mapping process to identify stakeholders in other states and territories could be useful, and would probably produce similar results.

2. Outcomes

There is substantial evidence in the literature supporting the individual health outcomes of physical activity. There is some literature informing the social outcomes of sport and recreation programs. There is less evidence demonstrating whether expected outcomes are being achieved in Indigenous communities in the NT. The evaluation of the ATSIC sport and recreation program suggests that this is true Australia-wide.

3. Programs

Information on programs in the NT was obtained from consultations with funding bodies and service providers. These consultations highlighted the need for more evaluations to demonstrate the impact of programs. This requires identifying appropriate indicators that reflect the diversity of outcomes expected of programs, including accurate participation rates of Indigenous people.

4. Community

There is very little literature or documentation regarding the needs and objectives of Indigenous communities involved with sport and recreation activities, apart from some unpublished consultation processes conducted by NTsafe and the Office of Aboriginal Development. These documents, and consultations with community-based services, reveal that communities expect sport and recreation programs to reduce antisocial and self harm behaviour amongst their youth.

5. Future Research

This section of the report will suggest some potential areas of future research in the sport and recreation sector in light of the information gathered from the NT presented in previous sections of the report. These suggestions reflect the main issues to emerge from the mapping process and are not a definitive list of research potential. A review of international literature would assist in guiding further research ideas.

Indicators

One of the challenges for agencies is to identify appropriate indicators to measure the impact of the programs on communities in producing expected outcomes. Some of the difficulties in determining appropriate indicators include:

- difficulty in defining a 'successful' program given the various objectives of stakeholders;
- difficulty in finding appropriate measures that reflect objectives (eg. how to measure 'capacity', or 'social cohesion');
- lack of resources dedicated to sport and recreational research programs, particularly in Indigenous communities; and,
- difficulty in separating the impact of sport and recreation programs from other activities that occur in communities.

Funding bodies have developed internal assessment procedures to monitor programs. The NT Department of Sport and Recreation, for example, requires evidence of an ongoing program (ie regular activities), of a broad cross section of community involvement and that a community sport and recreation plan is developed. Community-based sport and recreation officers monitor programs by using indicators such as:

- participation rates in organised activities;
- enthusiasm for, and sustainability of, teams formed (eg. if teams last a season);
- continuity (eg. if the same people have played in the team all season);
- improvement (eg. if teams have improved grades); and,
- 'gut feeling' that the game/activity is well accepted by participants and community (qualitative).

The mapping component illustrated the wide range of agencies and corresponding range of expected outcomes of sport and recreation programs including health outcomes, education outcomes and community development outcomes. From these outcomes, there are a range of potential indicators to explore, including:

- health indicators - such as attendance at health centre, self harm indicators (eg. alcohol related injuries, non-accidental injuries, suicide attempts), long term evidence of chronic disease prevention;
- indicators of reduced antisocial behaviour - such as reports of vandalism, break-ins, and minor crime from police statistics and community council data;
- economic indicators - such as money saved from vandalism, amount of money outlaid for program, prediction of money saved by preventing chronic diseases;
- community cohesion indicators - such as the ability of the community to employ sport and recreation officers or youth workers, level of substance abuse in the community, continuity of community council; and,
- educational indicators - such as school attendance rates.

Central to identifying appropriate indicators is consulting Indigenous communities to elicit their perceptions of a 'successful' program. As discussed in 'The Community' component of this report, there is very little information available on communities' expected outcomes of sport and recreation programs. At the same time, community acceptance is recognised to be one of the critical factors in achieving the objectives of the program. A thorough understanding of the range of perspectives is clearly needed to assist in defining a 'successful' program and the corresponding objectives to be measured.

Economic Analysis

A recent study conducted in Australia has examined the economic costs of a sedentary lifestyle, and the economic gains as a result of sufficient physical inactivity (Stephenson *et al.* 2000). This study analysed national level data. During consultations agencies suggested that an analysis of the economic costs and gains as a result of a sport and recreation program would be useful to demonstrate the value of programs, particularly in light of the higher prevalence of preventable chronic diseases in Indigenous communities. The analysis would also need to reflect the different social value that Aboriginal communities place on sport and recreation programs, compared to the analysis at a national level.

An economic analysis would need to incorporate:

- potential savings from prevention of chronic diseases due to sport and recreation;
- potential savings from prevention of vandalism and other antisocial behaviour due to sport and recreation;
- an estimation of the economic value of sport and recreation programs to Indigenous communities (ie due to increased self-esteem, community cohesion etc);
- initial start up costs of sport and recreation programs; and,
- costs of operating and maintaining sport and recreation programs, including facilities.

Case Studies

Case studies are an effective research tool that can be utilised to highlight locally specific information. For example, the ASC has developed an information booklet which describes 5 successful ISP projects across Australia (ASC undated). A similar project with a more in-depth analysis of the impact, costs and process of developing and implementing sport and recreation programs would be a useful resource for strategically planning future activities.

The literature identified the following factors that contribute to useful programs:

- the continuity of a sport and recreation officers;
- availability of funding and human resources;
- skill and self motivation of the sport and recreation officer (ability to source funding, to conduct programs that are consistent with community needs and expected outcomes);
- community involvement in the design of sport and recreation programs; and,
- community involvement in implementation of sport and recreation programs.

Case studies could be used to identify and explore these and other factors particularly relevant to conditions in the NT.

Intervention Study

One (or several) communities could participate in a study that examines the impact of introducing and establishing a sport and recreation program. Tatz (1995, 1987) and others (eg. Royal Commission into Deaths in Custody report) suggest that sport and recreation activities provide a tool to facilitate social cohesion in Indigenous communities that are otherwise in 'disarray and disorder'.

While it is acknowledged that sport and recreation can provide centrality, there is limited information on the measurable impact on individuals as well as the wider community, and under what conditions such programs might be catalysts to community development. A prospective study would collect data as the program proceeded, and would provide a useful resource documenting the constraints and solutions of implementing a sport and recreation program.

A retrospective study would be useful in investigating the long term impacts of sport and recreation programs.

Conclusion

Underpinning the range of research proposals is the initial identification of appropriate indicators to measure the expected outcomes of programs. It is envisaged that once indicators have been identified, further research could be conducted on the range of topics as discussed above.

From discussions conducted with Indigenous Sports Development Officers and service providers elsewhere in Australia, it is clear that the need for appropriate indicators is of national importance. The literature review revealed that there is a significant gap in evaluation and monitoring of programs, primarily because of unclear objectives and difficulties in measuring outcomes.

There is considerable enthusiasm in the sport and recreation sector in the NT for increased examination of the health and social impact of Indigenous youth sport and recreation projects.

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Contacts in the NT

**Australian Council for Health Physical
Education and Recreation (ACHPER) NT**
PO Box 2331
Darwin NT 0801
ph. 08 8981 5375

ATSIC Regional Offices

Yilli Rreung ATSIC Regional Council
PO Box 426996
CASUARINA NT 0811
ph. 08 8944 5621

Yapakurlangu ATSIC Regional Office
PO Box 321
Tennant Creek NT 0861
ph. 08 8962 1999

Alice Springs ATSIC Regional Office
PO Box 2255
Alice Springs NT 0871
ph. 08 8959 4211

Papunya ATSIC Regional Office
PO Box 2255
Alice Springs NT 0871
ph. 08 8959 4211

Miwatj ATSIC Regional Office
PO Box 246
Nhulunbuy NT 0881
ph. 08 8987 1866

Jabiru ATSIC Regional Office
PO Box 426 996
CASUARINA NT 0811
ph. 08 8944 5621

Garrak-Jarru ATSIC Regional Office
PO Box 84
Katherine NT 0851
ph. 08 8972 1433

CREATE NT
GPO Box 3023
Darwin NT 0801
ph. 8981 9965

Department of Sport and Recreation
GPO Box 1448
Darwin NT 0801

Indigenous Sports Officer
ph. 08 8982 2311

NT Institute of Sport
ph. 8922 6811

**Duke of Edinburgh's Award
NT Division**
GPO Box 4821
Darwin NT 0801
ph. 08 8945 0033

National Heart Foundation (NT Division)
PO Box 4363
Darwin NT 0801
Ph. 08 8981 1966

**Northern Territory Department of
Education**
PO Box 40921
Casuarina NT 0811
Ph. 8922 6066

**Northern Territory Indigenous Sports
Council**
PO Box 43081
Casuarina NT 0811
ph. 08 8985 6244

NTsafe
PO Box 39764
Winnellie NT 0821
ph. 08 8922 3344

Police Fire and Emergency Services
PO Box 39764
Winnellie NT 0821
ph. 08 8922 3344

Territory Health Services
PO Box 40596
Casuarina NT 0811

Food and Nutrition Unit
ph. 08 8999 2953

Alcohol and Other Drugs
ph. 08 8999 2464

