

SPORT PARTICIPATION AND PLAY

HOW TO GET MORE AUSTRALIANS MOVING

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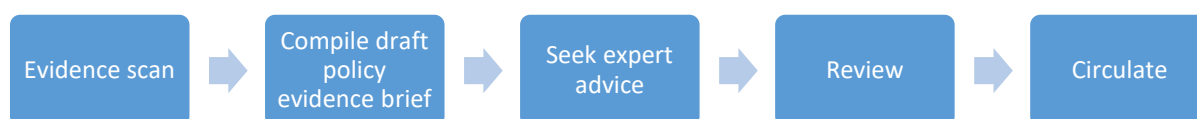
About us

The Mitchell Institute for Education and Health Policy at Victoria University is one of the country's leading education and health policy think tanks and trusted thought leaders. Our focus is on improving our education and health systems so more Australians can engage with and benefit from these services, supporting a healthier, fairer and more productive society.

The Australian Health Policy Collaboration is led by the Mitchell Institute at Victoria University and brings together leading health organisations and chronic disease experts to translate rigorous research into good policy. The national collaboration has developed health targets and indicators for preventable chronic diseases designed to contribute to reducing the health impacts of chronic conditions on the Australian population.

Process

The Mitchell Institute's policy evidence briefs are short monographs highlighting the key evidence for emerging policy issues. We work with our partners in the Australian Health Policy Collaboration to seek expert advice on topics, content and context.



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Overview policy objectives and strategies

Policy objectives

Connected policies to support participation for all

Maximise purpose and use of existing and new sport infrastructure and facilities

Establish targeted sporting programs for those most at-risk

Focus on the early years

Build the capacity of sporting organisations and clubs

Enabling strategies

1. Establish a sport in all policies approach.
2. Measure and monitor sport participation.
3. Embed active learning in schools.
4. Develop clinical referrals (social prescribing) to support physical activity and sport participation for at risk populations.

1. Improve access to sport and physical activity participation through better local area planning.
2. Improve access to infrastructure investment for community land and sport facilities use.

1. Establish a range of modified sport programs for targeted populations.
2. Keep the fun in sport.

1. Embed active learning in early childhood services.

1. Establish an outreach program for implementation by sporting organisations and clubs.
2. Build up the influence of sport clubs in health.

Introduction

Physical activity is good for health, and participation in sport is known to be one of the best ways to be physically active. Participation in sport – and particularly in organised club-based team sport – is known to contribute to positive physical and psychosocial health above and beyond individual-based physical activities. Participation in sport in school and early adult years is also an important contributor to continuing engagement in recreational physical activity in later years.

This policy paper is intended to contribute to the development of policy support for participation in sport at all ages and in all communities in Australia.

Physical inactivity in modern populations and communities is now recognised as a major contributor to the high rates of preventable chronic diseases across the world and Australia is no exception. One in two Australians has a chronic disease; increasing proportions and numbers of people have two to four chronic conditions and it is estimated that one-third of the burden of these diseases is preventable. Adults and young people in Australia have low to very low rates of physical activity and lower rates of participation in sport. More Australians now watch sport than participate in sport. Compared with previous generations, Australia's population now has much lower rates of physical activity and, in parallel, rising rates of obesity, preventable chronic diseases and mental health concerns. Encouraging population wide participation in community sport is recognised as one of the most direct and effective measures to lift physical activity rates at all ages.

This paper responds to, and proposes policy objectives and strategies to support effective implementation of, the aims of *Sport 2030*, Australia's first national sports plan, which was released in mid-2018 and is described as “a comprehensive plan to reshape the face of Australian sport and build a healthier, more physically active nation” [1]. *Sport 2030* recognises that participation in ‘sport for all’ is a significant challenge that is important to the health of the nation as well as to pathways to elite sport.

Sport policy in Australia

The first federal government sport portfolio was established in 1972 and, through the next 45 years, the focus of national sport policy has generally been on investment in and support for elite sport and athletes. In the mid 1990s, national sport policy began to take on an additional focus of improving population health outcomes.

State and territory governments support both elite and community sport. The Sport and Recreation Ministers' Council (more recently referred to as the Meeting of Sport and Recreation Ministers) established the first National Sport and Active Recreation Policy Framework in 2010 [2]. This framework has guided the development of sport policy across Australia and has included as a priority increasing community (sport) participation. Each state and territory government has also developed strategic policies reflecting the key principles of the National Sport and Active Recreation Policy.

Sport 2030 recognises that participation in ‘sport for all’ is a significant challenge that is important to the health of the nation as well as to elite sport [1].

Sport 2030 provides a new framework for sport policy in Australia and aims to “encourage more Australians to be involved in sport and physical activity, from childhood through to senior years, so they receive the health and social benefits participation delivers” [1].

Sport 2030 has identified current and future barriers to sport participation. These include:

- people opting for sport and physical activities that are flexible and less organised;
- the use of digital technology (among young and older groups);
- the rise in sedentary or low-activity lifestyles;
- screen time;
- lack of sporting facilities and inefficient use of existing facilities; and
- supporting sporting clubs to stay relevant.

Redressing these barriers to encourage sport participation throughout the community will require both investment and action from all levels of governments, the sport industry and the establishment and strengthening of new and existing partnerships to achieve the vision proposed in *Sport 2030*.

This policy paper has been prepared by an expert working group of sport, physical activity and health experts, working through the Australian Health Policy Collaboration, a national network of health and public policy experts supported by the Mitchell Institute at Victoria University, Melbourne.

The paper has collated evidence of effective participation policies and implementation strategies both within Australia and internationally that support improved population health outcomes and proposes a suite of evidence-informed policy measures that would directly contribute to the aims of *Sport 2030*. This paper also considers how sport and health policy can and should complement each other in stimulating and facilitating increased participation in sport and increased levels of physical activity for better health across all ages.

Sport 2030 – a new framework for Australia

Sport 2030 provides a contemporary policy framework for sport policy in Australia that recognises the role of sport in engaging individuals in healthy levels of physical activity. The vision articulated in the plan is for:

‘Australia to be the world’s most active and healthy nation, known for its integrity and sporting success’

Sustained participation in sport contributes to higher levels of physical activity and to improved population health and wellbeing [3]. Insufficient physical activity is a major risk factor for poor health, particularly chronic diseases such as cardiovascular diseases, cancer and diabetes [4].

One of the four key priority areas identified in *Sport 2030* is ‘*Building a more active Australia – More Australians, more active, more often*’ [5.]

Figure 1 *Sport 2030* key priority area



Building a More Active Australia

- › Drive movement for life through sport and physical activity participation for all Australians
- › Ensure all Australian children have the skills, confidence and motivation to be active for life and safe in the water
- › Reduce barriers to sport and physical activity participation, including swimming, and actively promote incentives for participation
- › Coordinated investment in sport and recreation facilities to achieve sustainable outcomes for communities, with a focus on universal design to ensure sport is accessible to all Australians

Sport 2030 sets an achievement target for this priority of a 15% reduction in inactivity in the Australian population by 2030. The target aligns with the global target established by the World Health Organization (WHO) for improved physical activity for populations by 2030 [4] and is consistent with the target of a 10% reduction by 2025 that was agreed on by leading Australian experts and organisations through the Australian Health Policy Collaboration [6].

Achievement of the 2030 target requires that policies, investments and implementation for the next decade be aligned with the best evidence of how to most effectively lift participation in sport and increase physical activity levels in the population.

Sport 2030 identifies the challenges that must be met for the 15% reduction in physical inactivity to be achieved, in the lack of suitable sport facilities to service the growing Australian

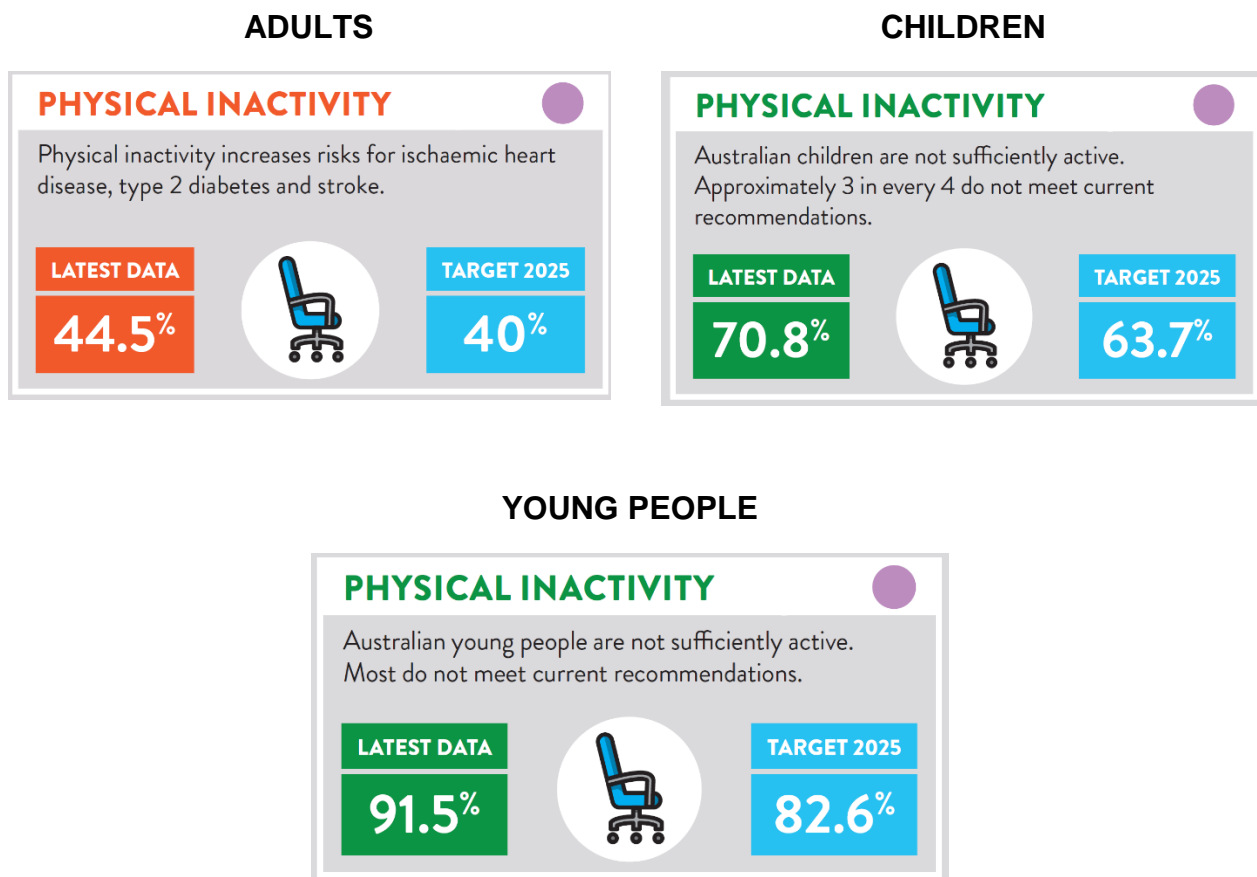
population. The plan also identifies a range of sub-populations within Australia who are the least active, including low-income households and older Australians. As well, during adolescence, participation in sport begins to drop away significantly, with higher rates of reduction in participation by females [7]. A sustained focus on increasing participation in physical activity across the life-course, together, with targeted approaches to address significant life stages and community groups where participation decreases sharply or remains persistently low, will be essential to achieve the vision of Australia's inaugural national sports plan.

Why does sport participation matter to health?

Physical inactivity has been called “the greatest public health problem of the 21st century” [8]. In 2011, the International Society for Physical Activity and Health identified sport participation as one of seven proven, evidence-based ‘best buys’ to promote and encourage participation in physical activity [9].

Australians are not engaging in sufficient physical activity. A national report card from the Australian Health Policy Collaboration, [Australia's Health Tracker](#) 2016 [10], draws on nationally available data to highlight the worryingly low levels of physical activity amongst the Australian population. Approximately three in four children, nine in ten young people and almost one in two adults are not meeting the national recommends for daily physical activity [11].

Figure 2 Graphics from Australia's Health Tracker 2016



Sport is a strong contributor to economic, health, education and community benefits. The Intergenerational Review of Australian Sport (2017) undertaken for the Australian Sports Commission by Boston Consulting Group (BCG) estimates strong economic, health, education and community benefits by 2036 if Australia addressed the trends identified in the 2017 report [12]:

- almost \$12 billion in additional economic activity each year relative to what would be achieved without action;
- \$2.6 billion of annual productivity improvements due to a more productive and engaged workforce;
- \$9 billion in net health benefits by lowering the annual incidence of chronic disease and early mortality;
- more children who learn better and have higher educational outcomes and lifetime earnings – around \$1.5 billion each year; and
- stronger and more cohesive communities resulting in greater social capital.

The Intergenerational Review of Australian Sport also shows that sport offers benefits to all of those involved, not just direct participants [13]. Over two million Australians volunteer in community sport and recreation clubs [12]. The labour input of these volunteers has an estimated annual value of \$4 billion [14].

Health benefits

Participating in sport is good for overall health.

Research shows that those participating in club-based sport are more likely to gain health benefits including a decreased risk of chronic physical and mental health conditions such as diabetes, cardiovascular disease (CVD) and depression compared to non-club participants [15]. Regular physical activity reduces body fat, reduces risk of chronic disease such as CVD, Type 2 diabetes and some cancers, strengthens bones and muscles (therefore reducing the likelihood of falls) and has an array of mental health benefits all leading to living a longer life [16]. Recent research suggests physical activity can reduce the risk of developing some dementias and can improve functioning for dementia-affected individuals [17].

Any amount of physical activity will exhibit positive health responses. The WHO recommends a minimum of 150 minutes of physical activity per week for adults to experience meaningful health benefits [18] but recent evidence suggests that even 15 minutes of moderate-intensity exercise per day (or 90 minutes per week) has significant health benefit to those at risk of CVD [19]. Furthermore, this research found a reduction in all-cause and all-cancer mortality and an average three-year extension to the individual's life.

Physical inactivity is estimated to contribute to 2.6% of total disease burden in Australia and combined with overweight and obesity, this increases to 9% - on par with the leading risk factor for disease in Australia, tobacco smoking [20].

Given the relationship between physical activity and health, and that physical inactivity is a risk factor for poor health that can be modified, Australians should be encouraged to participate in a form of physical activity every day with an aim to meet the minimum recommended levels of physical activity.

Psychosocial benefits

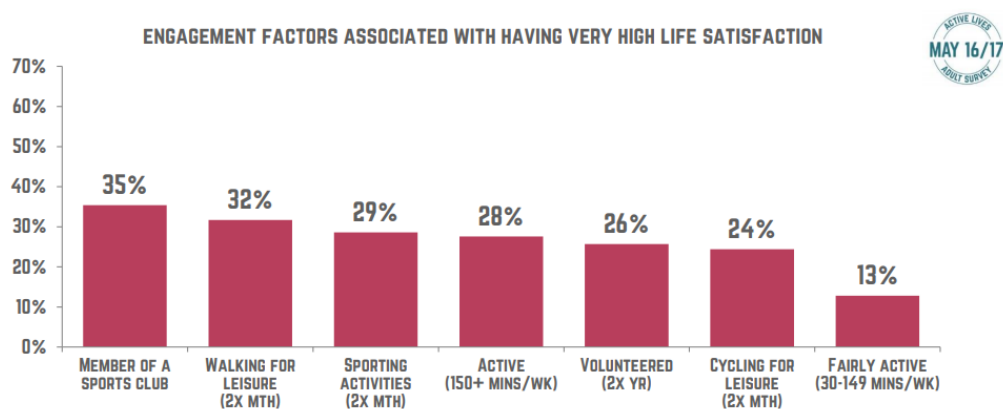
There is strong evidence of the psychosocial and social benefits of sport for the individual participant and the broader community. Participation in sport contributes to a rich social tapestry in Australia through engagement and cohesion, community attachment, a sense of belonging and camaraderie [21].

Community sport clubs are important settings not only for sport participation but also for the social engagement of individuals and communities, especially in rural and regional areas where there are often fewer leisure-time activities on offer. Sport can strengthen community identity and provide a sense of belonging, connecting diverse groups and facilitating social networks across socio-economic, religious and ethnic barriers [22].

Sport can be a means of developing psychological resilience [23]. Communities which are more resilient have greater social capital – an important asset particularly for regional and rural communities that are experiencing challenges such as ageing populations and declining infrastructure and services [22]. Resilient people can improve or better maintain quality of life throughout the life course.

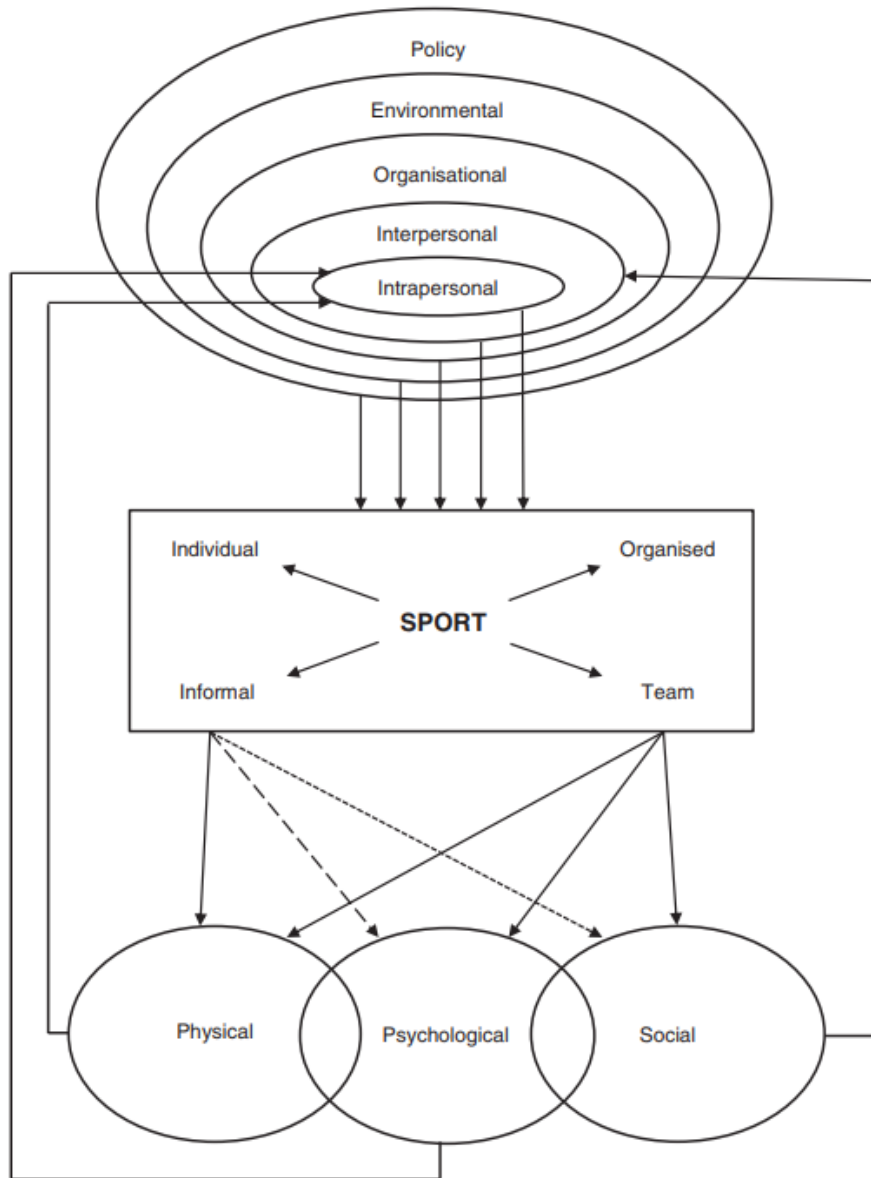
In the UK Active Lives Adult Survey (conducted from May 2016-May 2017), both the biggest and the third biggest drivers of life satisfaction were sport participation, with the biggest being a member of a sport club and the third biggest being engagement in sporting activities (see Figure 3) [24].

Figure 3 Drivers of life satisfaction from the Active Lives Adult Survey



Sport participation is known to positively influence self-efficacy, self-worth, social behaviours, pro-school attitudes, motivation, goal orientation, relatedness, friendships, task orientation and team building, and reduce bullying and racial prejudice [25-27]. Team-based sport is more strongly associated with improved health outcomes than individual physical activity, thought to be due to its natural social characteristics [26]. The Health through Sport Conceptual Model depicted in Figure 4 below outlines the reported physical, psychosocial and social benefits relating to health in the context of sport.

Figure 4 Health through Sport conceptual model



Adult sport participation has a range of psychological and social benefits including improved wellbeing, vitality, enjoyment, sense of belonging, social functioning and life satisfaction, and reduced distress, stress and depression [25]. Australian researchers compared the health-related quality of life and life satisfaction of women who participated in club-based team sports to that of women who participated only in individual physical activities. They concluded that the greater health benefits of those involved with club-based sport were largely due to the social nature of engagement, and that these benefits result from improved social connectedness, social support, peer bonding and self-esteem [28].

The opportunity for choice and fun is recognised as an important factor for adults to participate in sport and through this, acquire health benefits [25]. In contrast to sport participation, other forms of physical activity, like domestic chores and active transport, are not necessarily perceived as enjoyable [25].

For older adults, participation in sport can foster enjoyable and challenging experiences, provide positive social interactions and feelings of competence, and facilitate positive expectations and perceptions of their ageing identity and body [29, 30]. A recent systematic review of the determinants of and trends in participation in sport by older adults found participation in sport could improve older adults' health, while poor health restricts sport participation [29].

Personal development benefits

Through sport, children learn about important developmental and life concepts such as honesty, teamwork, fair play, respect, adherence to rules, competition and failure. Sport can improve children's self-esteem and social interaction, reduce depressive symptoms [26] and foster important behaviours and skills such as cooperation, selflessness, stress management, perseverance, appropriate risk-taking and delayed gratification [31]. Children who participate in club-based sport have more positive, helpful and cooperating behaviours than those who do not [32].

Involvement in sport during school years can deter and even protect against risky behaviours and rebellious behaviours in adolescence [33]. Furthermore, children who participate in sport are more likely to:

- engage in protective activities such as exercise and eating healthy diets;
- have a positive outlook on school, peers, teachers and parents and themselves; and
- be less likely to skip school, get involved in fights, vandalise property and experience emotional distress [33].

Sport 2030 acknowledges the recognised correlations between sport and improved academic outcomes [34, 35].

Research also suggests that sport participation is of particular benefit to women's career pathways [36]. In a recent study, 74% of women in executive positions stated that their sporting background contributed to their career success, and 94% of women in the C-Suite (for example, Chief Executive Officers or Chief Financial Officers) played sport (Figure 5) [37].

Figure 5 Sport's benefit for women's advancement



The Australian policy landscape

National sport policies

Achieving a healthier, more physically active nation requires both health and sport policy, funding and strategies to contribute to, and to complement, each other.

The inclusion and extension of physical activity in definition and focus in *Sport 2030* brings Australia in-line with countries such as the UK and New Zealand. The target outcomes for *Sport 2030* in Figure 6 below articulate the **direct contribution of sport to health**, and highlight the **complementarity of health and sport policy** – with both able to contribute to decreased rates of physical inactivity and increased sport participation, leading to better health outcomes across the population.

Figure 6 Sport 2030 overview

Overview of Sport 2030

Australia's national sport plan has four key priority areas which will, when fully implemented, create a platform for sporting success through to 2030 and beyond.

The priorities are:

- **Build a more active Australia** – More Australians, more active, more often;
- **Achieving sporting excellence** – National pride, inspiration and motivation through international sporting success;
- **Safeguarding the integrity of sport** – A fair, safe and strong sport sector free from corruption; and
- **Strengthening Australia's sport industry** – A thriving Australian sport and recreation industry.

The strategic priorities are interrelated to ensure we address the key relationships between participation, high performance, integrity and the sport industry more broadly. This recognises that the measure of sporting success is far more than how many Olympic gold medals Australia wins.

Sitting under the priority areas are five target outcomes that will:

- **Improve the physical health of Australians** – through the benefits of sport and physical activity, including reduced risk of chronic conditions.
- **Improve the mental health of Australians** – through the recognised mental health benefits of sport and physical activity, including the improved management of mental illness and greater social connectedness.
- **Grow personal development** – from taking up a new challenge, to setting a new personal goal or striving for the podium, being active can help everyone endeavour to be their best self.
- **Strengthen our communities** – by harnessing the social benefits of sport including through improved cohesion and reduced isolation; and
- **Grow Australia's economy** – building on the already significant contribution of sport to the Australian economy.

These outcomes will help to create a healthier, more prosperous Australia at an individual, local, regional and national level – built on a success in sport that will be the envy of world.

Prior to the release of *Sport 2030*, Australian sport policy was guided by two major sport policy documents: *Australia's Winning Edge 2012–2022*, an elite sport strategy, and *Play.Sport.Australia*, (a community level participation strategy). In 2016-17, the Australian Government invested over \$357 million in the sport and recreation sector [38]. Investment into elite sport (able and para) was over \$101 million in 2017-18 [39], compared to a substantially lower investment of \$20 million for community level participation.

Sport 2030 now provides specific policy aims and objectives that require investment and implementation for the ambitious 2030 goals for increased levels of physical activity throughout the Australian population. Whilst there is only one target specified in *Sport 2030* – a 15% reduction in physical inactivity by 2030 – the plan does suggest a series of specific targets and program guidelines to be developed by the Commonwealth Department of Health in consultation with Sport Australia.

State and Territory sport policies

The *Australian Sport, the pathway to success* report published by the Australian Government in 2010 recognised the need and opportunity to strengthen partnerships between states and territories to achieve community and sporting success [40]. This was reiterated in the 2010 National Sport and Active Recreation Policy Framework [2].

State and territory governments have a number of responsibilities within the sport and active recreation system. In addition to each state and territory establishing its own institute/academy of sport, state and territory governments have departments responsible for sport and recreation. Departmental responsibilities include providing leadership, collaborating with other levels of government, formulating and coordinating policy that prioritises sport but also achieves cross-cutting government objectives, investing into sport infrastructure and partnering with service providers to improve access for at-risk populations [2].

Each Minister for Sport is also a member of the national Meeting of Sport and Recreation Ministers, which provides opportunities to strengthen state and territory relationships and sport policy across all levels of government.

Currently, several state based programs aimed to increase physical activity in children through sport participation are in operation.

The New South Wales state government Active Kids Program aims to promote physical activity and support more children to engage in an active lifestyle. The program (currently under evaluation¹) will run until 2021, allows parents to claim a \$100 Active Kids voucher each year to use towards registration or membership fees for structured activities [41, 42]. The vouchers can be redeemed at approved Active Kids providers. The Office for Recreation and Sport (South Australia) also have an established voucher program [43]. Several states support local sporting clubs through grants programs [44]. Sport and Recreation Victoria's Sporting Club Grants Program funds sporting uniforms and/or equipment and also workshops to facilitate increases in capacity and skills for coaches, administrators or committee members and managers [45]. The Government of Western Australia also partners with other government agencies, non-profits and the private sector to deliver a number of physical activity participation programs and initiatives [46].

¹ registration trial number ACTRN12618000897268

Local Government sport policies

With over 530 local councils across Australia, local governments are a key player in increasing sport participation. The focus for local governments has been on provision of facilities and (limited) investment into sport development programs. *Sport 2030* has identified the role of local government as significant in ‘the Sporting Ecosystem’.

Local governments also support community sport providers and clubs and from time-to-time, local governments have injected funds to improve facilities to increase access to high quality public sport and recreation facilities as well as setting aside and developing land for community use [47].

Role of health policy

In recent years, efforts have been made to align health and sport policies in Australia. In 2007, the Federal government shifted the sport portfolio into health for the first time (Table 1). The alignment of sport with the health agenda was outlined in the 2008 Australian Government discussion paper, *Australian Sport: emerging challenges, new directions*, as there was recognition of the central role sport played in a preventive health agenda. The discussion paper concluded that sport is “a powerful tool in building the health of the nation” [48].

Table 1 Federal government sport portfolios since 1983.

Date	Department	Ministry
1983-1987	Sport, Recreation & Tourism	Sport, Recreation & Tourism
1987 – 1993	Art, Sport, the Environment, Tourism & Territories	Art, Sport, the Environment, Tourism & Territories
1993 – 1996	Environment, Sport & Territories	Sport & Territories
1996-1998	Environment	Sport, Territories & Local Government
1998 – 2001	Industry, Science & Resources	Sport & Tourism
2001 – 2007	Communications, Information Technology & the Arts	Arts & Sport
2007 -	Health & Ageing	Youth & Sport

Source: Hoye & Nicholson 2009

In 2011, the Sports Ministers of Australia developed the first National Sport and Active Recreation Policy Framework to guide the sport and active recreation sector and to leverage sport to achieve whole of government objectives including health and education, social inclusion and community development. The 10-year framework, published by the Australian Government Department of Health, is a landmark agreement and sets out the agreed roles and responsibilities of governments – at all levels – to leverage sport policy to meet health objectives.

A review from Hoye & Nicholson (2009) also suggested that governments have an increasing desire to “look to sport for assistance in solving ‘health-related’ problems of declining physical activity levels and the increasing obesity of Australians” [139]. This notion is supported by the 2014, independent government commissioned report, *Future of Sport in Australia*, also known

as the Crawford Review. The Crawford Review identified sport as “significant contributors to the Australian Government’s preventative health agenda” and listed 39 ‘must do’ initiatives relating to continuing success at the elite or participatory level, social inclusion, preventative health, pathways or funding”[49].

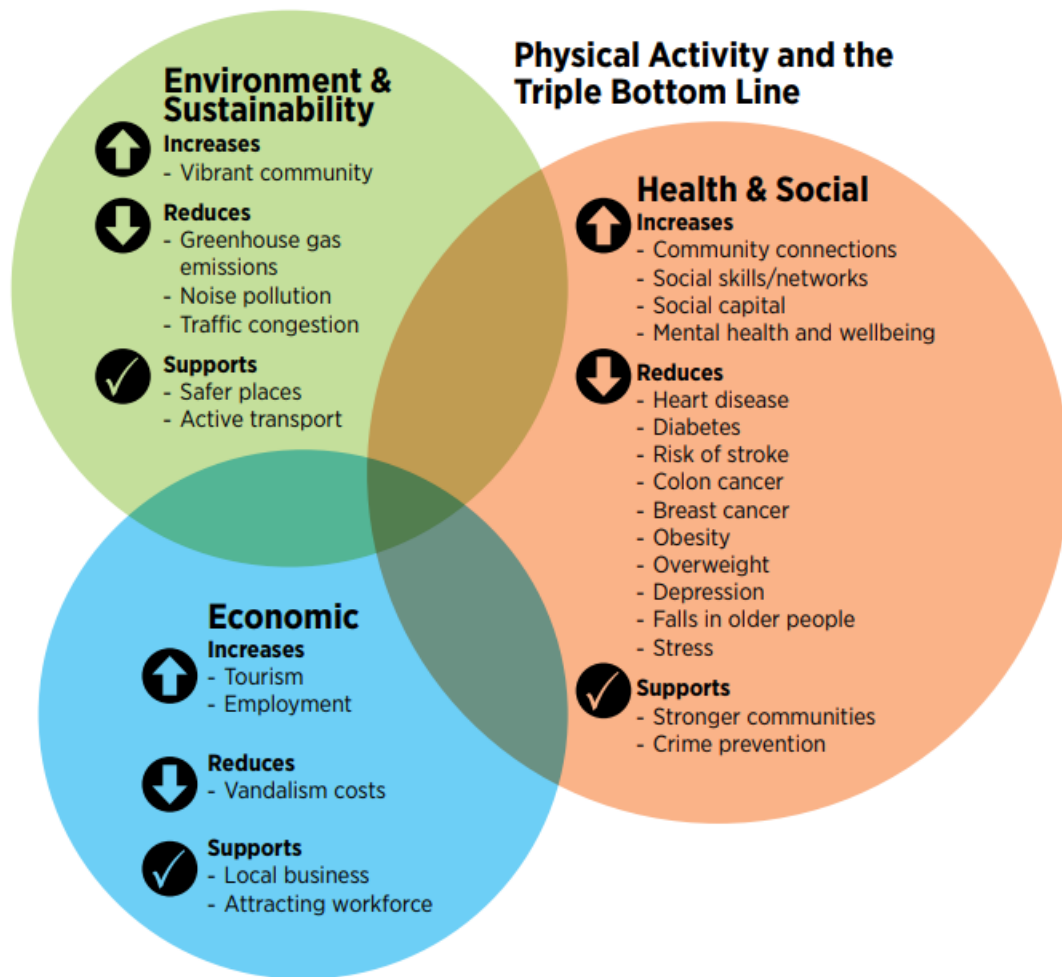
At the State and Local Government level, several jurisdictions across Australia are demonstrating the value of sport to health policy. The Western Australia Public Health Act 2016 mandates a state public health plan (prepared by the Chief Health Officer) and local public health plans (prepared by each local government district) [50]. The introduction of this Act has led to the development of *Sport and Recreation and Public Health*, a resource developed by the Department of Local Government, Sport and Cultural Industries in Western Australia [51]. The resource aims to highlight the important role of local government in improving health stating:

*“Apart from continuing traditional roles in regulation of environmental health, proposed changes to public health legislation provide **an opportunity to highlight the role that local governments already play**, in creating physical environments, providing facilities and infrastructure for sport, recreation, leisure and community and delivering programs and services that encourage participation in health promoting activities”*

Figure 7 [51] illustrates the economic, health and environment benefits of physical activity at the community level.

Evidence supports sport as a key strategy to improve physical activity [52] and is recognised by the International Society of Physical Activity and Health as one of seven best investments for physical activity [9]. Leveraging sport as a health-enhancing strategy has the potential to be particularly beneficial in Australia given the high rates of inactivity across all ages.

Figure 7 Physical Activity and the Triple Bottom Line



International sport policies

Globally, sport policies are expanding from a focus on elite or high-performance sport to include increased levels of community-level sport participation. The WHO Regional Office for Europe's *Promoting sport and enhancing health in European Union Countries: a policy content analysis to support action* provides a framework for action to help countries adopt a 'sport-for-health' policy [53]. The compelling evidence of sport participation for population-level health benefits has prompted countries such as the UK, the Netherlands, New Zealand, South Africa and Finland to support physical activity through national policy.

United Kingdom

Sport has been a particular focus for the UK Government over the last 20 years. Initially sport policies focused on mass community level participation, but have shifted to specifically target young people's sport, sport in schools and elite sport. In 2015, the policy framework *Sporting Future: A New Strategy for an Active Nation* represented the most important shift in more than a decade for UK sport policy. *Sporting Future* redefined success in sport and shifted the focus on elite sport to a particular focus on community engagement for population groups that are not engaged or have low engagement in sport participation. This policy initiative "looks beyond simple participation to how sport changes lives and becomes a force for social good" [54]. Five key outcomes were identified: physical wellbeing, mental wellbeing, individual development, social and community development and economic development [55]. More recently, *Sport England: Towards an Active Nation* presents a national implementation strategy for the UK Government to deliver on the five outcomes in *Sporting Future* [54].

The *Sporting Future* policy document is a cross-government strategy. An inter-Ministerial Group on Healthy Living has been established, with representatives from health and social care. This group has an initial focus on sport and physical activity but is expected to broaden the focus over time to include health inequalities. Other examples of the policy impacts of *Sporting Future* are:

- **stronger ties between Sport England and Public Health England**, particularly around public campaigning and messaging of physical activity;
- **ongoing measurement of sport's contributions to the overall health and wellbeing** of the UK population;
- £100 million (A\$179 million in 2018) investment over four years in a new approach to address inactivity through the Local Delivery Pilot. This project aims to build **local approaches** in specific areas and communities to tackle inactivity and reach under-represented groups;
- a new **evidence-based** publication from Sport England on the links between sport, physical activity and health outcomes to help make informed funding decisions about types of interventions and their effectiveness; and
- establishment of Sport England's Families Fund **targeting lower socio-economic groups**. This £40 million (A\$72 million) fund will support families with children to get active and play sport together.

Netherlands

Sport policy sits within the Ministry of Health, Welfare and Sport in the Netherlands. Local governments are the most important actor in sport policy with the national government's role being primarily coordination. The major policy document, *Sport and physical activity close to home*, recognises that investment of government resources is necessary to help everyone to engage in an active and healthy lifestyle and aims to produce a sporting society [56, 57].

Key examples of how sport policy is working to achieve health policy objectives include:

- **A national 'sport for all' policy;**
- A **grant program** for sport clubs, fitness centres and other sport providers has been set up to **support sedentary or low-participation groups**. The three target groups for this program are sedentary people, overweight children and youth in low-income neighbourhoods; and
- The Youth Sports Fund **enables disadvantaged families to join a sport club**. Professionals who work with these families (doctors, youth care workers and others) apply for funds to purchase uniforms or equipment related to the participation of the families in sport clubs. Funding for the Youth Sports Fund comes from the Ministry of Social Affairs, sponsors and private partners such as The Rabobank Foundation [58].

Most recently (September 2018) the Dutch government published '*Plezier in bewegen*' ('*It is fun to move*') a comprehensive report produced as joint advice to government by the Dutch Sport Council, the Council for Community Health and Society, and the Education Council [59]. Three key recommendations were presented aimed at not only the schools but also sport clubs and child day-care organisations. These are summarised as follows:

- Strengthen the engagement of primary to secondary school students in moderate intensity physical activity to twice a day for at least half an hour;
- Create and increase the opportunities for specialist physical education teachers to deliver programs, and assist and support other teachers to deliver such programs; and
- Anchor and extend the programs delivered at the schools in the wider (local) community and appoint specialist coordinators to create and maintain a connected local network.

Finland

“Sport policy is designed to promote sport and physical activity and, through them, the wellbeing of the population, as well as competitive and performance sports and related civic activity” – Ministry of Education and Culture [60]

Sport and physical activity are recognised as important factors in strengthening civil society and inclusion in Finnish policies [61] as well as contributing to a healthy population. In a 2013 budget proposal, the Finance Committee of the Finnish Parliament included a recommendation to focus sport funding on those areas that produce the biggest reductions in physical inactivity [62]. This recommendation was adopted in the *On the Move National strategy for physical activity promoting health and wellbeing 2020* later that year.

The *Sports Act*, introduced in 2014, focuses on sport participation for all in Finland [63]. It acknowledges that sport and physical activity is a basic service to all citizens and aims to promote population health and wellbeing as well as elite sport. It provides a foundation for municipalities to reorient their traditional provision of sport from competitive sport to providing sport for whole communities.

A second major policy document endorsed by the Ministry of Social Affairs and the Ministry of Education and Culture is *On the Move*. *On the Move* is underpinned by the principles of a **‘sport for all’ policy** and aims to promote engagement in physical activity for health and wellbeing for all Finns for the year 2020 [62].

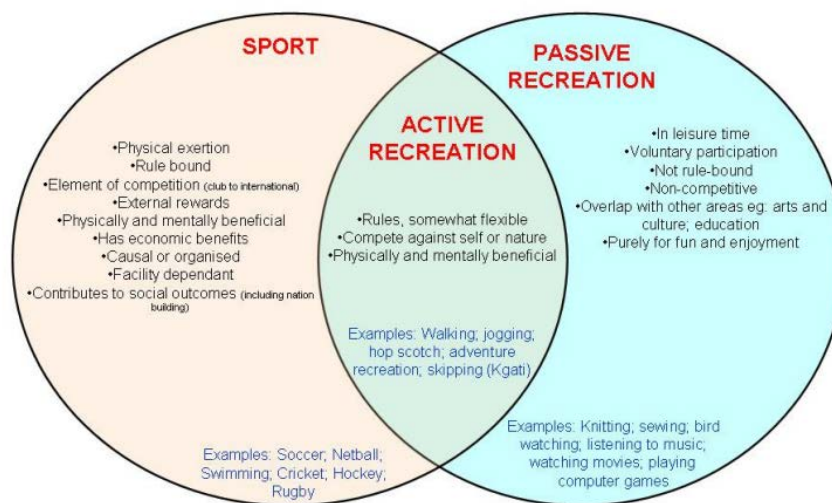
South Africa

“No country can expect to achieve and sustain success at an elite level without a strong participation base in the community, as that is the beginning for every champion.” – White Paper on Sport and Recreation for the Republic of South Africa [64]

The *White Paper on Sport and Recreation for the Republic of South Africa* provides strategic and policy direction for a coordinated, integrated and aligned sport system within which all components are focussed towards a common set of goals and objectives for South Africa. Published in 2012, the *White Paper* provides the policy framework (the “what”) [64] for the National Sport and Recreation Plan (NSRP) (the “how”) [64] [65]. The NSRP is the first sport plan developed by South Africa. A specific focus of the NSRP is to broaden the base of sport and recreation in South Africa. There are three objectives to drive the implementation strategy:

1. to **improve the health and wellbeing** of the nation by providing mass participation opportunities through active recreation;
2. to **maximise access to sport**, recreation and physical education in every school in South Africa; and
3. to promote participation in sport and active recreation by initiating and **implementing target campaigns**.

Figure 8 How physical activity is conceptualised in South Africa’s National Sport and Recreation Plan



New Zealand

Sport New Zealand is a national agency that promotes, encourages and supports physical recreation and sport in the country. The agency was established in 2002 under the *Sport and Recreation New Zealand Act 2002*. Sport New Zealand has produced three major sport policy documents:

- Sport NZ Group Strategic Plan 2015–2020;
- Community Sport Strategy 2015–2020; and
- High Performance Sport New Zealand Strategy 2017–2020.

Although it maintains a specific high-performance strategy, New Zealand places strong emphasis on strengthening the local delivery of sport across the life course, with particular focus on low-participation communities. There is strong recognition through the Sport NZ Group Strategic Plan of the ability of grassroots sport participation to enrich lives but also to lead to high-performance sport. The Strategic Plan has four focus areas to guide investment and resources and to create pathways to participation and the skills needed to win on the world stage:

- young people;
- local delivery (particularly in low-participation communities);
- competitive sports (including talent identification); and
- leading high performance.

A recent report from Sport New Zealand further highlights New Zealand's commitment to sport. *The Value of Sport* provides a comprehensive outlook of the health, social, developmental, economic and overall wellbeing benefits of sport [66]. The report highlights the significant health benefits (and savings) of investing in sport to address the increasing incidences of chronic diseases in New Zealand. In 2013, an estimated NZ\$200 million of direct health-care costs was attributable to physical inactivity [67]. The report states that, if physical inactivity was eliminated, a number of preventable chronic diseases could be avoided including 7.9% of heart diseases, 9.8% of type 2 diabetes and more than 13% of breast cancer cases.

Various implementation initiatives and related work is in progress or about to be started in New Zealand's plans:

- further **collaborative work** across government and alignment with the Ministry of Health, the Ministry of Education and the Accident Compensation Corporation;
- investment of NZ\$1.385 million into Aktive – Auckland Sport & Recreation initiative – in 2016–17 to create **opportunities for low-participation communities** in Auckland to engage in sport [68];
- development of a **national measurement tool** to provide annual participation data;
- continuation of the He Oranga Poutama (HOP) initiative to **support Maori wellbeing through sport** and active recreation. HOP has strengthened cultural identity and facilitates overall health and wellbeing [69, 70];
- ongoing support for key stakeholders (particularly councils) to **create fit-for-purpose sport and recreation facilities** to meet the needs of communities now and in the future; and
- a KiwiSport funding initiative to **increase the number of school-aged children participating in organised sport**. KiwiSport is funded through the Ministry of Education and Sport New Zealand.

Policy framework

Significant and evidence-based changes are required in order to effectively reverse declining participation in sport and physical activity and associated rising rates of poor health in the Australian population. With the vast majority of Australians – adults, children and young people – not meeting national physical activity guidelines, together with a rise in overweight, obesity, and preventable chronic diseases, it is clear that cross-sectoral policy approaches that are coordinated and complementary are essential.

The international context provides guidance on this. Leading Western countries use a sport-for-all approach to improve population participation in sport. A policy scan of European Union countries found six key strategies are applied [53]:

- dual focus on elite sport and ‘sport for all’;
- infrastructure development;
- targeting communication and promotion to vulnerable population groups;
- developing appropriate ‘sport for all’ settings;
- shared responsibility between several relevant government departments; and
- ongoing measurement, evaluation and policy adjustment.

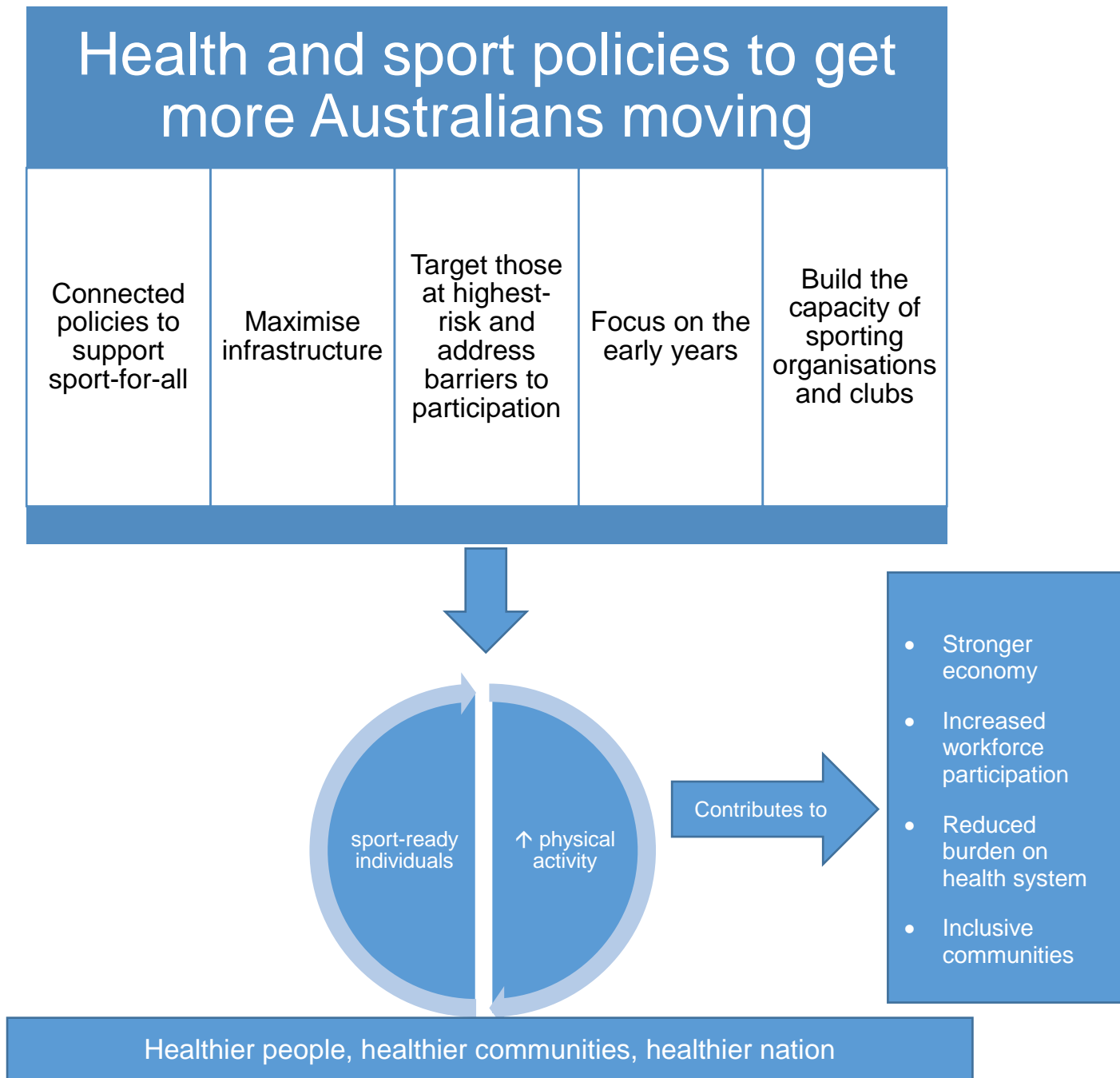
These six strategies are also considered relevant to Australia in Australian literature and by stakeholders.

Within the Australian context, since 2014, the Confederation of Australian Sport has built a collaboration of health, sport and education organisations to develop a strategic and cohesive approach to increasing physical activity levels across Australia. This collaboration – consisting of around 80 national organisations across health, education and sport sectors – have endorsed a cross-sector collaboration between health, education and sport to improve physical activity and reduce the health burden of inactivity [71].

Drawing on the latest research and building on the work of many Australian researchers, clinicians and organisations, leading Australian sport and health experts propose the following policy framework (Figure 9).

Implementation of the national framework can contribute to a healthier and physically more active Australia, shape Australia’s sporting future and deliver on the vision of *Sport 2030*.

Figure 9 Proposed national sport and health policy framework



Policy objective: connected policies to support participation for all

Sport 2030 identified the challenges and drivers that inhibit participation in sport in communities and by individuals in contemporary society.

The report identifies the challenges as multi-faceted, involving sporting and community infrastructure availability and utilisation, including in schools, and substantial changes in social characteristics in the population of Australia and in the engagement of people in physical activity and sport as well as in the weight and health of the population.

Sport 2030 identifies particular challenges as:

- Changes in the way we live, work and engage in sport - where once people planned their weeks around sporting and physical activity, today many Australians now look for sporting and physical activities that work around their week.
- Increasing fragmentation of sport – with traditional sports now competing with the proliferation of more individual, less organised physical activities such as yoga, bushwalking, cycling, gym and park-runs that provide a much greater diversity of options for physical activity.
- The Australian population is becoming older, more ethnically diverse and time-poor with levels of physical inactivity in the population a major cause of chronic health conditions and a significant contributor to obesity. The majority of people in Australia are inactive, with 81% of young people, between the ages of 5 and 17 not meeting physical activity guidelines. 56% of adults, or more than 10 million people, including 75% of people over 65, are living sedentary or low activity lifestyles.
- There is both a lack of suitable sporting facilities and inefficient use of existing sporting facilities. There needs to be more encouragement to create opportunity to share facilities across community organisations and schools.
- We need to build on current levels of sport and physical activity in **schools** to ensure each day children are meeting the physical activity guidelines. Research shows fitter children achieve better academic results and children who grow up playing sport are also 10 per cent more likely to remain active as adults.
- Many of our **sporting organisations** have served us well for more than half a century, but one of the key challenges is the ability of current organisations to adapt to and keep up with the pace of change.

Source: taken from *Sport 2030*

For these challenges to be met, initiatives and investments by Sport Australia and sporting organisations alone are likely to be insufficient. Cross sector policies and collaboration, reflecting the importance of sport to better population health and education outcomes, will be critical to achievement of the objectives of *Sport 2030*. As with international developments, Australia needs to build the intersection of health and education policies and services with sport policy objectives to promote sport and physical activity that delivers health and education benefits and that contributes to reducing the risks for poor health that are related to low levels of physical activity.

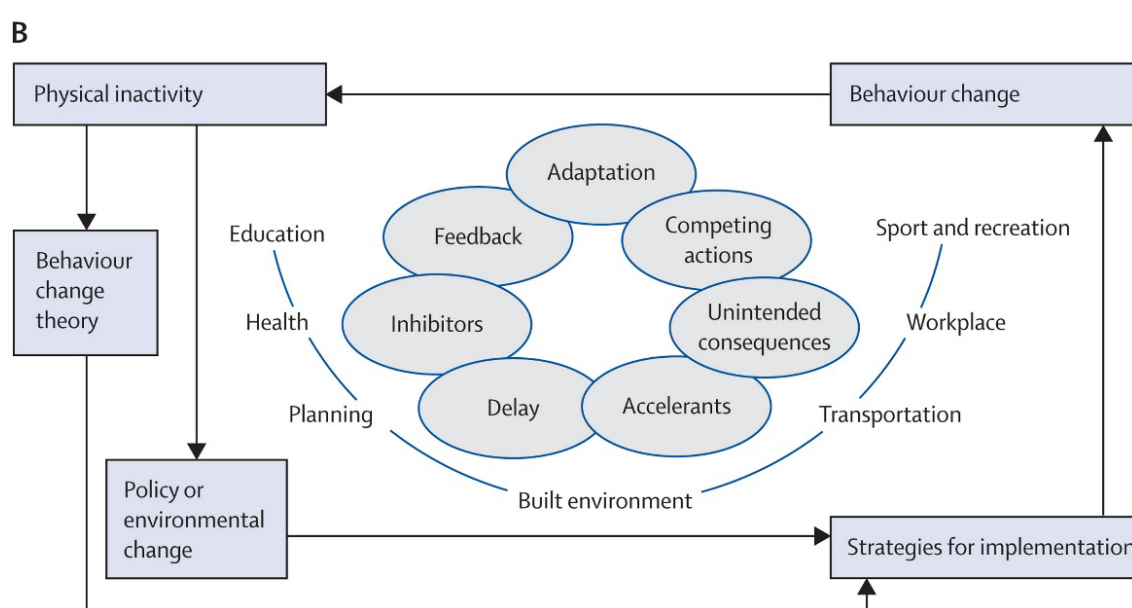
There is ongoing work on the development of a cross-sector collaboration with the COAG Health Council, COAG Education Council and Committee of Sport and Recreation Officials (CASRO) to improve physical activity and sport participation.

Enabling strategy 1: establish a sport in all policies approach

What is the strategy?

Both the education and health sectors are important stakeholders in the promotion of physical activity and therefore, directly or indirectly, in sport participation. The interactions between sport, health and education are profound. **To achieve the objectives outlined in Sport 2030 requires complementary and collaborative leadership, policy and initiatives from the three sectors – with government agencies positioned to provide national leadership to this.** A systems approach – through coordinated approaches and initiatives – to physical activity has been recognised as important to address the concerning levels of inactivity worldwide (Figure 10) [72].

Figure 10 A systems approach to physical inactivity



Within the European context, there has been strong leadership in understanding and strengthening the ‘sport for all’ approach across the European Union. Guidelines from 2008 developed by an expert European Union Working Group “Sport & Health” state:

“To ensure the integration of policies which translate to physical activity in everyday life, there should be close and consistent cooperation among the relevant public and private actors when policies for sport, health, education, transport, urban planning, working environment, leisure etc. are developed. If policies that promote physical activity are successfully integrated, the easiest available option for citizens should be to choose a healthy lifestyle” [73]

The guidelines state that where sport and physical activity policies exist separately, they should be complementary and support each other, particularly to show the continuum from light intensity physical activity through to competitive organised sport.

The ‘sport for all’ approach is further articulated in the WHO Europe *Promoting sport and enhancing health in European Union countries: a policy content analysis to support action* document [53].

The Finnish government has shown that cooperation and collaboration between different administrative branches is effective [62]. In 2011, the Finnish Ministry of Social Affairs and Health and the Ministry of Education and Culture together convened a health-enhancing physical activity steering group with the task of drawing up a joint strategy and action plan for health-enhancing physical activity. The Committee for Health-Enhancing Physical activity included representatives from the Ministry of Social Affairs and Health, the Ministry of Education and Culture, the Ministry of Transport and Communications, the Ministry of the Environment and the Association of Finnish Local and Regional Authorities. The committee developed the current national strategy, for Finland, *On the Move* that has been adopted by the Ministry of Social Affairs and Health and Ministry of Education and Culture. The strategy is consistent with the principles of a 'sport for all' policy.

Issues addressed

- Addresses challenges identified in Sport 2030: including the need for suitable sporting and community infrastructure and utilisation. A coordinated approach would lead to increased availability of suitable sporting facilities and efficient use of existing sporting facilities, including encouragement to share facilities across community organisations and schools.
- Addresses goal of Sport 2030: sport and physical activity organisations are connected into other sectors such as health, education and infrastructure to tackle challenges such as physical inactivity and leverage sport for social benefits.

Expected outcomes

- Coordinated approaches across health, sport and education leads to increased sport participation and most efficient use of resources.

Enabling strategy 2: measure and monitor sport participation

What is the strategy?

In her speech at a global summit on measurement and accountability for results in health, former Director-General of the WHO, Dr Margaret Chan said:

“Accountability means counting. What gets measured gets done” [74]

In Australia, comprehensive measurement of population level risk factors for preventable chronic diseases is sub-optimal. The 2011-12 *Australian Health Survey* undertaken by the Australian Bureau of Statistics was a one off collection of anthropometric, biomedical and environmental measures collected and reported in Australia. The data has provided a baseline of Australia’s health and have been a rich resource for researchers, policymakers and clinicians. There is currently no commitment to a repeat of this survey. Calder et al. [75] details the importance of an investment in a second *Australian Health Survey* and recommends the survey be undertaken in the year 2021, and every six years thereafter. The ongoing *National Health Survey* and the *Aboriginal and Torres Strait Islander Health Survey* provide regular national data on population health, however, due to the nature of self-reported data, these surveys are less reliable and have inherent biases.

The AusPlay survey is a key strategy of Sport Australia’s participation strategy to get more Australians moving more, more often. Since 2015, this annual, cross-sectional survey has provided stakeholders, including Government and National Sporting Organisations, with information on the current state of play of sport participation at a national and state and territory level. In addition to AusPlay, data is currently being collected on Australian adults’ and children’s sport and physical recreation participation to help better understand the relationship between the activity habits of children and their parents.

Latest statistics from Australia show one in two Australians live with a chronic disease [76]. The WHO notes, “Achieving higher levels of physical activity in a population will also contribute indirectly to gains in other sectors vital to human development and economic progress” [77]. The same report recommends an integrated and coordinated approach across health and sport policy as a strategy for the prevention of chronic diseases, health promotion and socio-economic development. Given the high rate of chronic diseases and rates of physical inactivity for example, Australia should consider the value and importance of measurement and collection of high quality, ongoing, routinely collected data for both population health and sport participation. More importantly, health and sport departments should consider how these two sets of data can inform planning of Australia’s health services and get more Australians participating in sport. For example, there is a clear association between area levels of disadvantage and the proportion of the Australian population who are physically inactive [78].

Issues addressed

- Improved measurement is needed to routinely monitor and assess outcomes of policy measures against targets and improving accountability.

Expected outcomes

- Evidence-based planning of sport services, programs and infrastructure.
- Targeting of efforts to improve physical activity, for example a focus on areas experiencing disadvantage, which typically have lower levels of participation in physical activity.

Enabling strategy 3: embed active learning in schools

What is the strategy?

A growing body of evidence indicates that participation in sport as a child and adolescent is a predictor of physical activity participation later in life [79, 80]. A recent longitudinal analysis of seven years of sport participation data identified that entry into sport at 6–9 years is optimal and much more likely to result in long-term participation than entry at other ages [81]. Research also shows that incorporating physical activity into the school day can support academic outcomes, in addition to the inherent physical benefits [82].

Integration of physical activity within the learning environment and curriculum in schools has been shown to have direct education and health benefits. The Australian longitudinal Lifestyle of our Kids (LOOK) study is a comprehensive randomised controlled trial of the effects of a four year primary school physical education program. This study is based on physical literacy principles of teaching fundamental movement skills while fostering motivation and enjoyment of a wide range of physical activity, in complete contrast to training or activities such as the Daily Mile (see below). Most importantly, in addition to generating more physical activity in the school day [83] the LOOK study showed that this physical literacy approach reduced the incidence of blood markers of risk for type 2 diabetes and CVD [84, 85]. At the same time, the children who underwent 90 minutes of physical education per week improved their NAPLAN (national literacy and numeracy) scores 25% more than children who spent 90 minutes in the classroom [86] which is an added incentive for schools to improve their delivery of primary school Physical Education.

Following the LOOK trial, the Physical Education Physical Literacy (PEPL) approach was developed to minimise the costs of adding new physical education teacher positions into schools. PEPL supported a trained physical education teacher to work with a cluster of schools to professionally develop the knowledge and skills of classroom teachers to conduct quality physical education and to foster closer relationships of the schools with Sport Australia Sporting Schools and community sporting organisations. The PEPL approach has been trialled in (a) a multicultural suburban setting of 14 schools and (b) a regional rural setting of 15 schools. The main outcomes of the PEPL trials were that classroom teachers welcomed the flexibility of the PEPL coach's professional development, and improved their physical education teaching, which in most cases had been absent in previous years. Classroom teachers also began to work to the physical education part of the Health and Physical Education curriculum and introduced physical activity “snacks” in between classes requiring sustained concentration.

Implementation case studies

Box 1 and 2 describe additional Australian and international initiatives to promote active learning and/or physical activity in schools.

Box 1 Victorian Initiative: Transform-Us!

Transform-Us! is an innovative strategy developed by Deakin University that aims to get students moving more and sitting less. This low cost, easy-to-deliver strategy involves several programs to combat inactivity both inside and outside of the classroom.

Following a trial across 20 primary schools in Melbourne, this initiative is currently available to all Victorian Primary Schools. This initiative from Deakin University involved a range of partners with Deakin University including the Victorian state government.

Inside the classroom:

- Integrate movement into class lessons – incorporating movement into maths, history and other lessons
- Active breaks – taking short active breaks to interrupt prolonged sitting periods
- Curriculum content – nine lessons aligned with the Victoria Curriculum to increase knowledge and awareness about the importance of being active and sitting less

Outside the classroom:

- Promoting activity during recess and lunchtime
- Engaging families

The initial trial in 20 Victorian primary schools involved over 1600 students. Key findings from this include improved academic and cognitive outcomes within an active and dynamic environment.

Source: http://www.deakin.edu.au/ipan/our-research/transform-us!_nocache

Box 2 Global initiative: The Daily Mile

The Daily Mile is a simple and free initiative, which gets school children physically active for 15 minutes every day. The school-based program encourages children to run or jog, at their own pace in the fresh air with classmates for 15 minutes (around one mile) each day.

This initiative is not a replacement for physical education or sport, but rather a complementary non-competitive activity for children to participate in physical activity every day. No training, equipment, uniform or set-up is required.

Research indicates this program has been successful in getting primary school children more active, reducing sedentary time, increasing physical fitness and improving body composition [87]. Furthermore, the simplicity, flexibility, adaptability are noted as key success components to implementation of The Daily Mile [88].

Developed in the UK, there are now more than 36 countries and 3,600 schools and nurseries participating in The Daily Mile program.

Source: <https://thedailymile.co.uk/>

Issues addressed

- *Sport 2030* identifies the need to support schools to improve sport participation, with schools providing an ideal setting for facilitating knowledge of the importance of physical activity for health and education.
- Focus needed on how best to implement active lessons into schools because evidence suggests that some schools find it challenging to incorporate physical activity into lessons.

Expected outcomes

- Implementation of physical activity into lessons will ensure that positive health and educational outcomes are achieved. Integration of physical activity within the learning environment and curriculum in schools has improved educational outcomes and health benefits.
- Improved physical literacy in children leads to increased physical activity into adulthood.

Enabling strategy 4: develop clinical referrals (social prescribing) to support physical activity and sport participation for at-risk populations

What is the strategy?

Many people have unmet social needs that contribute to poor health and wellbeing. These include facing financial problems, unhealthy diets, low physical activity, social isolation, poor access to education and employment, poor housing and so on. Whilst not health issues, these issues can and often do contribute to the risks for poor health.

Several countries, notably the United States [89], UK [90] and New Zealand [91] have implemented social prescribing, a health service that connects people with practical help in their community to address factors that contribute to their health problems and for which health services and professionals are not appropriate providers [92].

The Green Prescription in New Zealand was established in 1998 through Sport and Recreation New Zealand to provide health professionals with the means to prescribe physical activity for those for whom this may address health risks or health conditions. The referral, access and review process is outlined in Figure 11. Several studies have identified the economic and health value of the program and that this intervention is effective in increasing physical activity levels and improving quality of life [91, 93, 94].

Figure 11 Green Prescription GRx New Zealand



Green Prescription is linked with a number of services across health and sport sectors, such as regional sport trusts, physical activity providers, primary health organisations and a variety of health agencies. The linkage of partner organisations to primary health care services supporting individuals with established health risk factors is critical to the success of a 'social prescribing' program.

The UK has a strong history of social prescribing schemes since their inception in the 1980s. In 2015-16, the Social Prescribing Network identified over 100 social prescribing schemes in the UK. Over the last ten years, social prescribing in the UK has evolved with most social prescribing models favouring a link worker model [90]. Social Prescribing was developed in part to address increased demand and budgetary freezes on Britain's National Health Service (NHS) [95]. The National Health Survey says social prescribing is a key component of universal personalised care [96].

Social prescribing can also help alleviate pressure on GPs. A 2016 UK report estimated around 20% of GP visits were about problems that have a social basis [97].

The Victorian Active and Life Scripts program developed by the Department of Health and Human Services aimed to increase the capacity of general practitioners to provide consistent, appropriate and effective physical activity advice to patients. This program, which ran between 1999 and the early 2000s provided a basic model of social prescribing. An evaluation of this program concluded that the program [98]:

- was highly cost-effective (cost-effectiveness ratios)
 - \$69 per patient to become more active in the short term
 - \$138 per patient to accrue a health benefit
 - \$3647 per disability adjusted life years saved
 - \$38 924 per premature death averted;
- was a catalyst to support general practitioners to promote physical activity to their patients; and
- increased awareness among general practitioners to assess and provide physical activity advice.

The social prescribing model is often a feature of workers' compensation schemes. In New South Wales, a social prescribing trial started in 2017 for injured workers, and has recently been extended for another 18 months [99]. This is described as Australia's first social prescribing pilot program [100].

Issues addressed

- Although physical activity referral programs such as New Zealand's Green Scripts are effective in improving physical activity, they are currently not implemented in routine clinical practice in Australia. For example, few general practitioners refer patients to exercise specialists [101]. A focus on how to implement and embed these programs into health care settings is required, requiring cross-sectoral collaboration.
- Addresses *Sport 2030* goal: sport and physical activity organisations are connected into other sectors such as health, education and infrastructure to tackle challenges such as physical inactivity and leverage sport for social benefits.

Expected outcomes

- Integration and establishment of social prescribing leads to a range of positive health and wellbeing outcomes. Learnings from other countries and in Australia indicate social prescribing could be a feasible solution to provide those at highest risk of inactivity with effective support to engage in basic levels of physical activity.
- Links sport and recreation sector to the health sector to improve outcomes for all Australians.
- Referral to existing programs and services in the community maximises the utilisation of existing resources.

Policy objective: maximise purpose and use of existing and new sport infrastructure and facilities

Better provision of sport facilities is linked with higher rates of sport participation [102]. Development of sporting facilities typically requires significant investment and land use planning [103], particularly as the population continues to increase and as our major cities become more densely populated.

Sport, planning and infrastructure policies should maximise the capacity of facilities within communities including schools, to increase sport participation.

Enabling strategy 1: improve access to sport and physical activity participation through better local area planning

What is the strategy?

Evidence-based local planning

The Sport and Recreation Spatial program of research including Geographical Information System, developed by researchers from two Victorian universities is a resource for the sport and recreation sector to help inform research, strategic planning, and development of participation programs and facilities [104]. This resource integrates data about sport and recreation participation, sport and recreation facilities, population demographics and population health from multiple data sources. The aim of the Sport and Recreation Spatial program of research is to investigate the availability and utilisation of sport and recreation participation and facilities, and health, for evidence-based decision making for the sport and recreation sector. The current uses of this research range from developing community profiles for local councils to inform planning, [105] to providing state-level analysis to inform strategic directions for sport, government and health departments [106].

A recent (2018) tool developed in Victoria — a Sport Facility Requirements Calculator — can calculate (in the context of new urban developments) the number of playing areas, per sport, required in order to provide for a level of participation equal to or greater than the aggregated participation rate for the Melbourne Metropolitan area. The Calculator also takes into account high-density urban developments where it may not be possible to reserve sufficient land to provide for optimal levels of participation in field sports requiring large playing areas. The calculator then assumes that the choice of sport is to some extent influenced by availability of and access to facilities, and enables the user to examine the effect of transferring demand from field sports with large playing areas to indoor sports with smaller playing areas [107].

Whilst there is evidence that the greater provision of facilities is associated with higher participation in sport, these associations differ considerably across regions and socio-economic status areas [102].

An Australian study looking at rural communities found that the lack of facilities restricted many individuals' participation in sport [108]. This study urged a focus on "spaces and places for all", encompassing the notion that shared-usage spaces, such as family-friendly and dog-friendly areas, are important for physical activity in rural communities [108]. In addition, the study identified the significant role of local government in promoting physical activity and sport through infrastructure and facilities.

The Victorian City of Greater Geelong's Infrastructure Development Guidelines recognises that sport, recreation and open spaces should be well designed to facilitate shared use among community users. The Guidelines [109] highlight the importance of 'fit-for-purpose' and useable spaces and takes into consideration that open spaces are often used both actively (for sport and recreation) and passively, (walking, sitting, picnicking and more) so must be designed to suit a range of opportunities and purposes.

Access to facilities can be a motivator for exercise. Recently, the Victorian government announced guidelines for female-friendly sport infrastructure to encourage women and girls to become more active and involved in sport [110]. This combination of sport participation and facility development will consider factors such as childcare and flexible timing of programs and competitions to cater for families. The Queensland government's Sport and Recreation Planning program supports better planning and prioritisation of sport and recreation infrastructure across the state [111]. This program funds evidence-based sport and recreation infrastructure for both state and local-level. Local governments particularly are encouraged to apply. Similarly, the Northern Territory Government's Facility and Capital Equipment Grant Program aims to create multipurpose facilities and fit-for-purpose facilities to increase participation opportunities [112].

Distance from sporting facilities can be a significant barrier to older adults' participation in sport or physical activity, especially if mobility is an issue [113]. Older adults who live close to sporting facilities are much more likely to play sport. An Australian study found that nearby sporting facilities as well as parks, swimming pools and footpaths, were enablers of physical activity amongst older people [114]. 80 Cities, a not-for-profit organisation based in Toronto, together with the American Association of Retired Persons (AARP)'s Liveable Communities and The Trust for Public Land has developed a guidebook on how to create parks and public spaces for people of all ages [115]. The founder and chair of 80 Cities, Gil Penalosa, advocates that, "if everything we do in our public spaces is great for an 8-year-old and an 80-year-old, then it will be great for people of all ages" [115].

Further, local authorities world-wide increasingly are closing streets, usually temporarily, to encourage safe outdoors play for children and families, to encourage physical activity and build community connections. A successful pilot in Edinburgh, Scotland has reported "hundreds of children, parents and neighbours reclaiming their streets for play, conversation and social interaction" [116]. In Canada, ball hockey takes over several streets in Canada up to three times a week from June to October, allowing children to safely play sport.

In Australia, a Victorian initiative, Play Streets has developed a toolkit to assist neighbourhoods in setting up temporary street closures to traffic so kids and parents can play outside. The toolkit is supported by VicHealth and various Victorian community councils.

A western Melbourne local council, Brimbank City Council, is using collective impact principles to underpin the redevelopment of public sport facilities to deliver social and health outcomes for the community [117].

Box 3 St Albans Leisure Centre redevelopment

The City of Brimbank is the second largest municipality in Melbourne. Located in the western region of Melbourne, the City of Brimbank is relatively disadvantaged, culturally diverse (about 42% of the population were born overseas) and incorporates one of the largest industrial areas in Melbourne.

Brimbank City Council is undertaking the redevelopment of the St Albans Leisure Centre to provide a health and wellbeing community hub. The hub will address health and wellbeing disparities in the community through provision of collocated services with a high quality leisure and vocational centre.

The Health and Wellbeing hub will adopt collective impact principles throughout the design and delivery of the new facility.

The collective impact principles aim to tackle deeply entrenched and complex social problems and is an innovative approach to making collaboration work across government, local organisations and citizens to achieve significant and lasting social change.

The new St Albans Health and Wellbeing Hub will be purpose-built and co-host a range of health and wellbeing community services with the aim to help address the high rates of ill-health and disadvantage in Brimbank. The facility is expected to be completed at the end of 2020.

Source: Brimbank City Council 2018

Issues addressed

- Lack of suitable and accessible facilities might restrict individuals' participation in sport.
- Will assist to achieve *Sport 2030* goals: to reduce barriers, allowing greater access to sporting facilities and infrastructure for all Australians no matter where they live; and sport and physical activity organisations are connected into other sectors such as health, education and infrastructure to tackle challenges such as physical inactivity and leverage sport for social benefits.

Expected outcomes

- Improved local area planning through use of sport participation data and planning tools such as the Sport Facility Requirements Calculator will lead to the development of sport facilities and opportunities that meet the health and social needs of local communities.

Enabling strategy 2: improve access to infrastructure investment for community land and sport facilities use

What is the strategy?

Shared sport and recreation infrastructure

The promotion of multi-use sporting facilities to maximise access and increase sport participation is a well-established strategy.

The Greater London Authority's policy is that sport facilities must be shared between schools, the community and sport clubs [118]. Current UK policies (national, regional and local) on leisure provision encourage sporting facilities to be multi-use to encourage more people to be physically active, improve community cohesion and target groups that historically have low participation [55].

The *Sport 2030* report acknowledges that schools' facilities can contribute to more physically active communities and actions such as "unlocking the School Gate" are an important step to maximising existing sport facilities. The National Sport and Active Recreation Policy Framework also acknowledges this principle and will measure facilities accessibility (including school facilities) to meet the needs of communities as part of an objective to support participation [2].

Several states and territories have created policies and guidelines to enable community use of school facilities, however, approval processes can be lengthy and often require multiple levels of approval e.g. from the school Principal and Parents & Citizens' Associations [119-122].

Healthy Active by Design, an initiative and toolkit produced by the National Heart Foundation provides a rich database of evidence, case studies and international examples on community facilities [123]. Shared sport and recreation facilities not only reduces cost and duplication of community facilities and services, but can also foster social interaction, develop a sense of community and build social networks [124].

The City of Boroondara, a Victorian local council, has identified that current sporting facilities in its community may not be adequate to fit expected population growth trends. The council aims to partner with local schools to utilise school sport courts and facilities to meet the high demand for indoor stadiums that have currently reached capacity at peak times to meet community needs and access [125].

Recent (2018) analysis from several Victorian sporting organisations also notes that metropolitan growth areas may have lower rates of participation due to a lack of infrastructure [126] and highlights the need for better mixed-land use.

The South Australian government has produced a guide for sport and recreation organisations on working with local government. This guide emphasises the importance of a focus on creating multi-function and shared use facilities including schools as a strategy to engage with local government [127].

The Australian Capital Territory (ACT)'s Strategic Plan for Sport and Recreation in the ACT & Region 2011-2020 also identifies maximising supporting infrastructure such as school facilities, playing and training venues as long term strategies, facilities and resources to provide for the demands of the community [128].

Mixed-land use

There is a growing body of literature highlighting how spatial planning can support health and enable healthier, more active lifestyles [129, 130]. An international study conducted in 2016 of 14 diverse countries and cities found areas with well-connected street networks, more diverse land uses and having more parks led to more adults walking and/or cycling (active transport) [131]. Importantly, the study highlighted the importance of mixed-land to increase active travel.

Research indicates that mixed-land use can influence and increase the networks and shared norms, values and understandings that facilitate co-operation within or among groups, known as social capital within a community – the more mixed-land uses, the greater the social capital [132]. The Organisation and Economic Co-operation and Development defines social capital as “networks together with shared norms, values and understandings that facilitate co-operation within or among groups” [133]. Social capital can positively contribute to a range of urban planning endeavours including:

- civic participation;
- trust;
- community cohesion, inclusion; and
- safety.

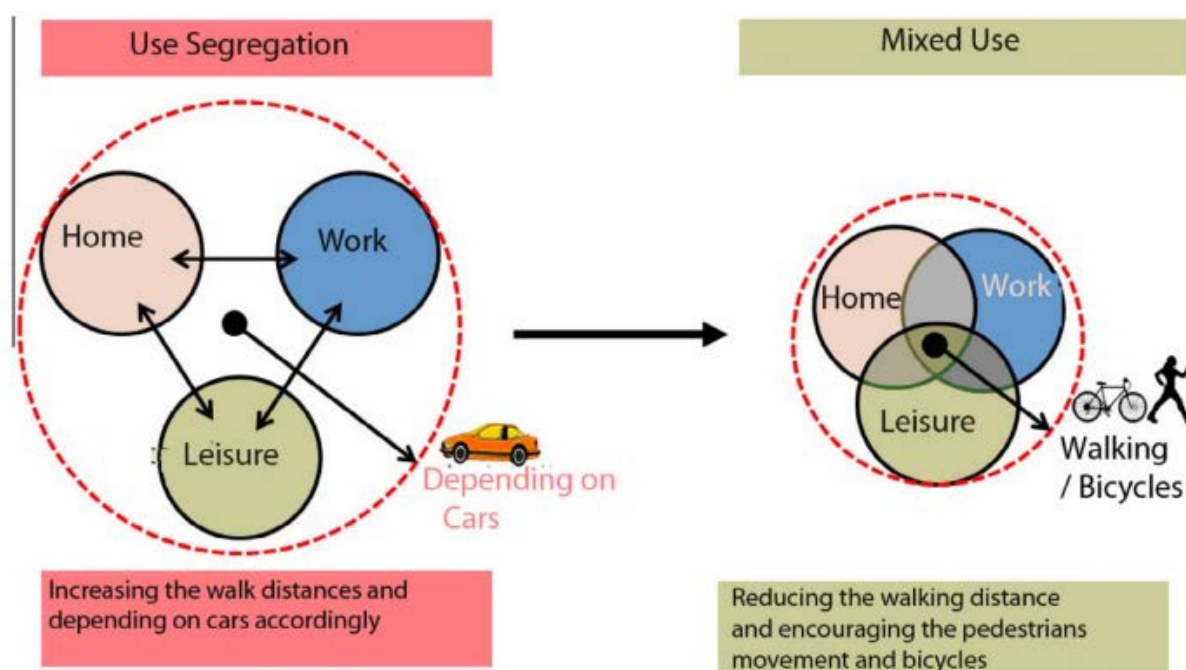
A 2016 Australian study examining social capital as a connective framework to enhance the sustainability of new or existing communities, provides four examples of how urban planning can contribute to building social capital [134]:

1. Ensuring co-location of human service agencies in activity hubs to facilitate access to services, characteristic of bridging and linking social capital.
2. Planning for social infrastructure concurrently with residential growth to provide adequate meeting places for social, recreational and educational purposes that can facilitate bonding and bridging social capital.
3. Designing and planning spaces to facilitate social interaction and enhance sense of community and health through the provision of public spaces, public seating and spaces towards the provision of physical infrastructure for the development of bonding and bridging social capital.
4. Inclusion of a range of human abilities and generations through neighbourhood design that enables greater mobility, inclusion, physical activity, safety, mental and physical health and equity, supportive of bonding and bridging social capital.

Not only are people living in neighbourhoods with mixed-land use (such as residential areas with local restaurants and shops) more likely to be more physically active (Figure 12) but policies that improve walkability and mixed-land use are also more likely to improve social capital [135, 136]. Conversely, neighbourhoods with a lack of mixed-land use can often leave children and young people with “nowhere to go” and contribute to sedentary activities such as watching more television [137].

The relationship between sport and social capital has been explored by numerous researchers in recent decades [138]. A 2008 analysis of social capital within Australian state governments and sport policies showed that policy makers and sport agencies recognised the relationship between sport and social capital with several states’ policy documents highlighting how sport contributes to social capital [139].

Figure 12 Influence of mixed-land use on daily life



Implementation case study

Countries such as India, the Dominican Republic and China have demonstrated that large cities can support sport participation through the use of public land (Box 4).

Box 4 How large cities in India and China are supporting sport through public land

Making space for soccer in India

Space for recreational soccer fields has become an increasingly pertinent issue in India, especially in [Mumbai](#). Many companies have formed to develop unused land in response to the demand for soccer space, and they construct fields 'in the unlikelyst of places'. These fields are usually small and hastily built on any land that is available, but they are providing ample opportunities for soccer aficionados to play. The use of these informal fields have contributed to a number of outcomes:

- **Economic outcomes:** small business owners have been able to capitalise on otherwise unusable properties and city residents are participating inexpensively.
- **Social outcomes:** city residents have a space for physical activity and sites can be a source of inspiration for aspiring professional athletes.

In China, basketball is both a recreational activity and an emerging profession

China currently is home to [millions of basketball players](#). In Beijing, common playing areas include public courts or schools, and [recreational basketball](#) is in high demand. The growing interest in basketball (at the amateur and elite) level has contributed to a number of outcomes:

- **Economic outcomes:** 800,000 new courts have been planned for development.
- **Social outcomes:** basketball has fostered a sense of community for many of China's only-child families and the Chinese Basketball Association promotes cultural diversity within the teams instead of players having to leave the country to play for international teams.

Source: Kenney, E. 2015 <http://thecityfix.com/blog/friday-fun-stadiums-public-parks-impact-space-sports-cities-erin-kenney/>

Issues addressed

- *Sport 2030* aims to remove barriers to enable the use of school sporting infrastructure by sport and physical activity organisations and the wider community.
- Addresses *Sport 2030* goal: barriers will be reduced, allowing greater access to sporting facilities and infrastructure for all Australians no matter where they live.
- Planning regulations support mixed-land use to support sport participation and maximise use of facilities.

Expected outcomes

- The promotion of multi-use sporting facilities to maximise access and increase sport participation.
- Mixed-land use increases social networks and shared norms, values and understandings that facilitate co-operation within and among groups.

Policy Objective: establish targeted sporting programs for those most at-risk

In 2013-14, approximately 60% of Australians aged 15 years or over reported participating in sport and physical recreation at least once during the previous 12 months – a decline from 65% in 2011–12 [140]. However, only 28% of those interviewed were involved in organised sport and physical activity.

Sport 2030 identifies several population groups at risk of being the most inactive:

- people over 65 years (older adults);
- people with a disability;
- Aboriginal and Torres Strait Islander people;
- people from culturally and linguistically diverse backgrounds;
- people living in regional communities;
- low income households; and
- women and girls.

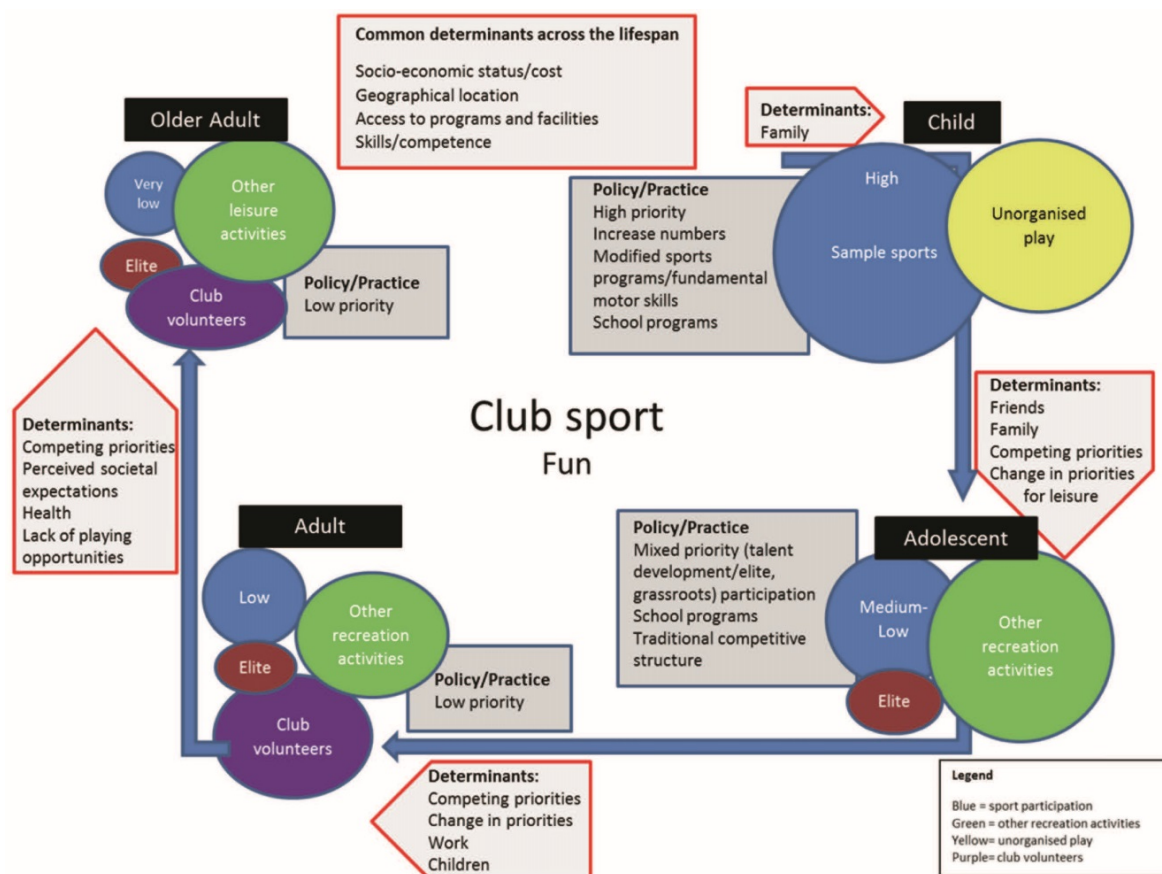
In addition to the groups listed above, the Australian Health Policy Collaboration argues that young people should be recognised as priority population at risk of inactivity. Data from *Australia's Health Tracker* show that one in nine young people (12-17 years) are not meeting daily physical activity recommendations [11]. Many Australian adolescents transition out of traditional club-based competition and into leisure activities that are less organised and require less time commitment [106]. The Australian Health Policy Collaboration notes that young people are included in the Movement For Life framework.

Multiple factors motivate and deter people's participation in sport and these can vary cross the lifespan. Motivations include enjoyment, social engagement [141, 142], better quality of life, and sometimes health issues such as weight management [143]. Figure 13 illustrates the barriers, enablers and determinants to participation in sport across the life course. These include, skill, social support from family and friends, competing priorities, change in priorities for leisure, work, children, perceived societal expectations, health and lack of playing opportunities [144].

Socioeconomic disadvantage is a significant barrier to sport participation. A recent Victorian study found, for almost all ages, genders and locations, participation rates were highest in the most socio-economically advantaged areas and lowest in the most disadvantaged areas [144]. This is similar to patterns in other countries [145, 146].

The high cost of participation in sport in Australia is a significant barrier for low-income families. Children and adolescents from low-income communities are not only much less likely to participate in sport due to financial barriers but have poorer access to sporting and leisure facilities [147], which can be exacerbated by safety concerns in some regions.

Figure 13 Sport participation determinants across the lifespan [30]



The barriers or perceived barriers to participation need to be understood in order to achieve change. A 2006 review of qualitative studies investigating the reasons as to why adults and children do not participate in sport and physical activity identified two common themes: the transitions at key stages of the life course and having to reorient individual identities during these times [141]. Additionally, a VicHealth study looking at populations with the lowest rates of participation – low income groups, new arrivals to Australia and people with a disability – suggests three key areas for improvement:

- flexibility in participation opportunities;
- leveraging the social aspect of sport participation; and
- strengthening the health benefits to sport participation [148].

A recent (2018) systematic review summarised the barriers of participation for children (Figure 14 and Figure 15) [149]. The two most common barriers identified for this age group was lack of time and cost.

The relationship between socioeconomic status and health is well established. Factors such as income, education and occupation level are recognised as factors that influence people’s health status [150]. These factors – a measure of socioeconomic status – have also been linked to a wide range of health problems such as diabetes, obesity and even early death [78]. An analysis by the Australian Health Policy Collaboration showed that in Australia, around 40,000 more people have died before the age of 75 in lower socio-economic groups over the last four years [78].

The World Health Organization's Commission on Social Determinants of Health final report provides a synthesis of the global evidence base and a set of recommendations that influence the social determinants of health and therefore improve health equity [151]. The Health Foundation, a UK charity also provides a set of resources on 'what makes us healthy' noting that an individual's opportunity for health is influenced by the social determinants of health [152].

Figure 14 Practical barriers to participation in sport for children

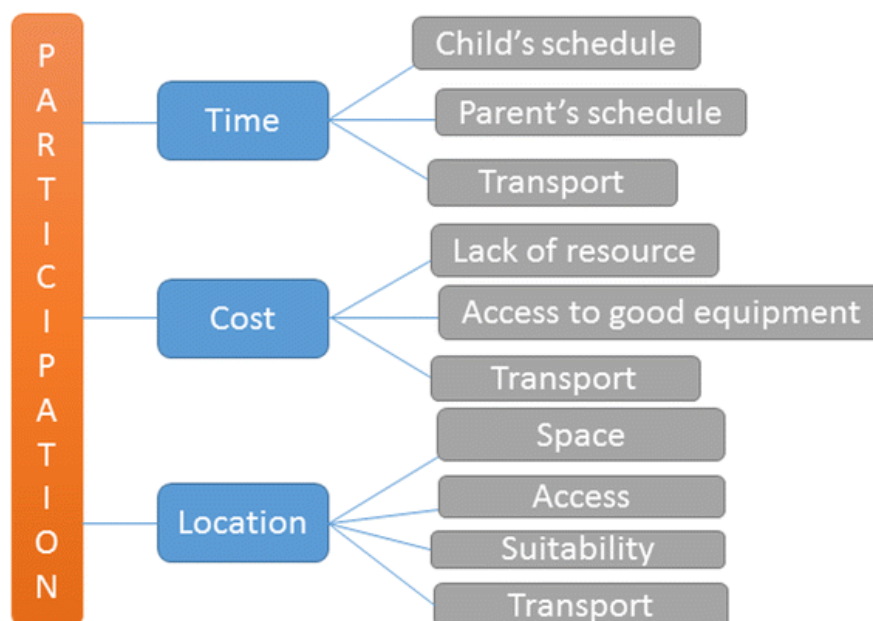


Figure 15 Personal barriers to children's participation in sport



Research indicates gender-specific barriers associated with girls' and boys' sport participation. Girls are more likely to rate knowledge, accessibility, role of partners and psychological constraints as the barriers to sport compared to their counterpart [153]. Body image, appearance and gender-based stereotypes are also unique barriers to girls' participation.

There is growing support to increase sport participation amongst women [154-156].

A recent study of sport participation for older adults investigated the benefits of, and barriers to, participation from the perspective of older adults as well as sporting organisations [157]. A major barrier identified was a lack of policy and strategic focus on older adults, as the sport organisations prioritised children and elite sport [157]. Further, older adults spoke of the societal expectations that sport was not perceived as an activity for older adults and this was further highlighted through the lack of marketing of sport to adults and older adults [157].

Older adults who live closer to sporting recreation facilities are much more likely to be engaged in sport. An Australian study found the association between sporting facilities, park, golf course, swimming pool or a foot path were enablers amongst older Australians [114].

Enabling strategy 1: establish a range of modified sport programs for targeted populations

What is the strategy?

Despite some worrying overall trends, there have been increases in the number of Australian four and five-year-olds playing sport in recent years, particularly through modified sport programs [144]. Modified sports are currently aimed primarily at children. Modified sport programs enable participation at the physical and mental level of development of children to ensure that playing sport first and foremost is a fun activity which in turn will positively impact overall health and wellbeing [158]. Popular modified sports for children include AusKick, (Australian rules football), ANZNetSetGo (netball), MiniRoos (soccer) and ANZ Tennis Hot Shots. There is also evidence that the optimum age of entry into these modified sport programs, for continued participation, is 7-9 years [159].

Modified games can provide a healthy level of competition and foster fundamental components of sport, including teamwork and tactics – mirroring similar, if not the same benefits as traditional sports [160]. The use of modified sports have already been recognised as an effective physical activity opportunity and strategy amongst Indigenous populations [161], people living with a disability [162] and for older adults [30].

In Victoria, there has been a recent increase in the development of modified or social/recreational sport programs for adults. These are aimed at creating more flexible, social and less structured ways to play sport, more places to play sport within communities and more sport for everyone [163]. Bowling with Babies provides an example of a sport which supports less active parents to become more active – focussing on their physical wellbeing in a supportive environment and connecting with other parents – with their baby [164]. Clubs are set up for parents to bring their babies on the green whilst participating in a game of bowls. Bowling with Babies also creates a local peer support network for expectant and/or new parents – a well-established intervention in public health [165].

Several states already encourage and support older adults to participate in modified sport. Initiatives such as 'Back in the Game' in Victoria – a modified game and sport activity focused on fun, friendship, followed by fitness – and walking netball, developed by Netball New South Wales (NSW) and the NSW Department of Family and Community Services, allow older adults to participate in sport in a safe environment to experience the health and social benefits of sport. The Victorian Walking Basketball Program is a modified sport program for older adults based on walking sports first established in the UK (2011). Evaluation of the Walking Basketball Program found that participants enjoy the social health benefits relating to the program and that having fun was important to them [166].

Design of new modified sport programs should be informed by evidence and also informed and co-designed by specific population groups to ensure the delivery is socially inclusive, culturally appropriate, accessible and effective for all members of the targeted community.

Implementation case study

Box 5 Doorstep Sport Club – Sport England

The Doorstep Sport Club (DSC) program was established to support young people aged 14-25 living in high areas of deprivation with accessible and affordable sport opportunities in their local community. The DSC program is built upon four 'rights': *the right time, right place, right price and right style*. It is about meeting local needs and is driven by youth insights.

An evaluation of the program (2013-2017) showed the targeted investment (£20 million) supported [167]:

- 1,097 Doorstep Sport Clubs
- Over 130,000 participants (of these individuals, 60% live in England's most neglected communities and almost all are from low-income families)
- 1,401 training courses
- 17,953 volunteer and coaches training

Doorstep Sport Clubs are fun and informal and exist in many different forms and are hosted by different organisations. Some may be friendly, competitive and structured but others may offer less structured sport in a more relaxed environment with social breaks and opportunities to 'hang out'.

The DSC program was funded by StreetGames, a national sport charity. However, many hosts also sought funding from other streams such as local authorities, sport organisations, not for profit organisations, private sector and housing associations to ensure financial sustainability.

Source: <https://www.streetgames.org/sites/default/files/DSC-Lessons-A4-Full-Report-web-version.pdf>

Issues addressed

- Targeting of groups at risk of low participation in physical activity. *Sport 2030* identifies several population groups at risk of being the most inactive:
 - people over 65 years (older adults);
 - people with a disability;
 - Aboriginal and Torres Strait Islander people;
 - people from culturally and linguistically diverse backgrounds;
 - people living in regional communities;
 - low income households; and
 - women and girls.
- The Mitchell Institute also identified adolescents as an important target group.
- Addresses *Sport 2030* goal of a diverse and inclusive sport and physical activity sector that supports more Australians to be more active more often.

Expected outcomes

- Given the success of modified sport in increasing sport participation in children, these principles should be applied to increase sport participation and physical activity in other target populations.
- Modified sports lead to increased participation among those most at risk of being inactive.

Enabling strategy 2: keep the fun in sport

What is the strategy?

Sport should be designed to be enjoyable for all.

The Aussie Sport campaign, a product of the Department of the Arts, Sport, the Environment and Territories, Maintaining the Momentum ran from 1992-1996, stressed that sport was not about winning; it was also about having fun [168].

The latest AusPlay survey found that adults are significantly motivated to play sport for the fun/enjoyment aspect – with physical health or fitness as the strongest motivation compared to non-sport related physical activity [169]. Several pieces of research also identified fun as a motivator for sport participation among children [141, 142, 170] and adults [23].

Modified sport programs for young children have a major focus on fun, friends and skill development which is important for retention [144]. However, modified programs are designed as an entry-level sporting program and to eventually encourage children who are good at sport to transition to competition-level sport. Given the sharp decline of sport participation amongst adolescents, [7] keeping a strong focus on fun in sport should be central to all sport programs relevant to adolescents, both traditional and modified. This should also be extended to particular populations groups that have low rates of engagement.

The FUN MAPS is an evidence-based framework developed to maximise fun for children and adolescents as a means to promote and sustain a healthy lifestyle through sport [171]. This framework is largely aimed at the adolescent age group and provides a model to understand and conceptualise 'fun' and also provides a standard practice for fostering positive, fun movement experiences through structured skill development and competition sport for youth. FUN MAPS can also be translated to a set of tools for coaches, parents and sporting teams.

However, the current funding framework for Australian sport emphasises the recruitment of new and younger participants rather than specific retention strategies, including the promotion of fun in sport, to support participation for established participants [7, 106].

Issue addressed

- Most people participate in sport for fun, however, current focus is often on competition, which may be a barrier to participation among several population groups, including adolescents and girls/women.
- Addresses *Sport 2030* goal of a diverse and inclusive sport and physical activity sector that supports more Australians to be more active more often.

Expected outcomes

- Increased emphasis on fun and enjoyment, for example through modified sports, leads to higher levels of retention in sport among adolescents and adults.

Policy objective: focus on the early years

There is consistent evidence that suggests physical activity tracks with age. A 27-year tracking study (from early childhood to adulthood) in Finland suggests behaviours starting in childhood are key to maintaining physical activity over the life course [170]. This is also consistent with an 8-year Finnish study of non-institutionalised seniors aged 65-84 years that found – regardless of chronic conditions – men and women maintained high levels of physical activity if they participated in sport from an early age (based on self-reported data) [171].

Skill development and competency are important predictors of sport participation [172]. Evidence supports the importance of skills development in early years (from birth to five years of age) [173] to increase physical activity participation and intensity in later life [174, 175].

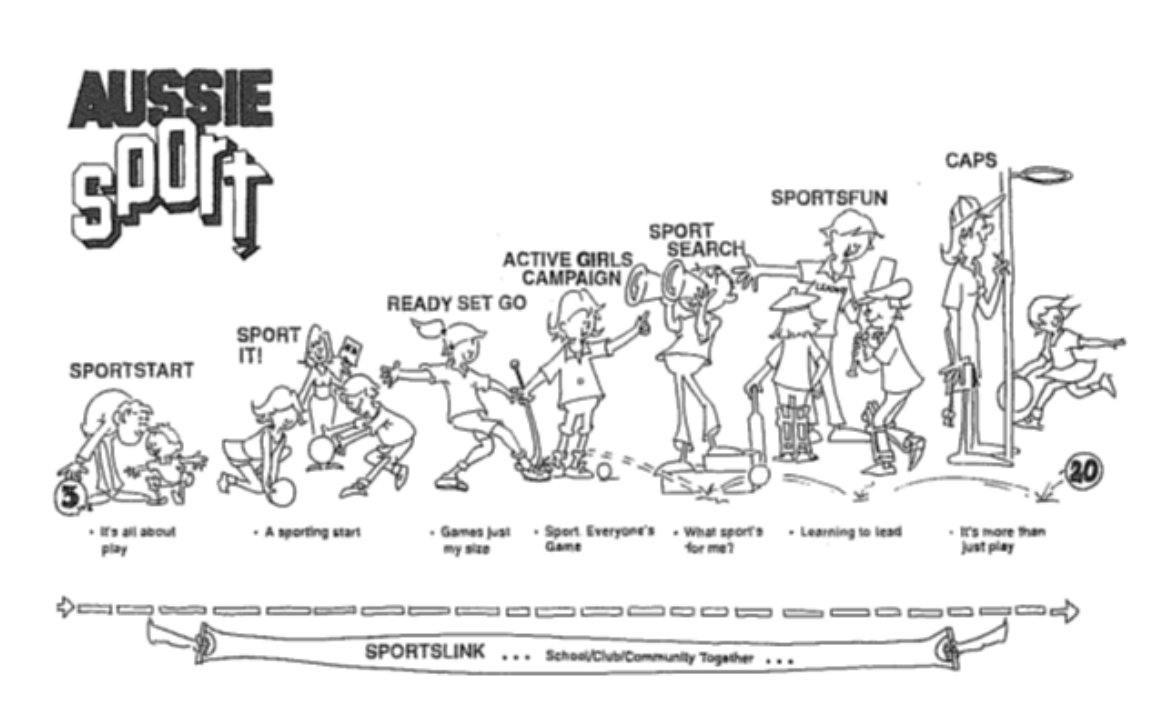
Enabling strategy 1: embed active learning in early childhood services

What is the strategy?

Policies and programs should consider the importance of ensuring universal development of fundamental motor skills for all children as the basic platform for promotion of lifetime physical activity. Australian governments have recognised the importance of the early years in promoting engagement in sport since the mid-1980s. The Aussie Sport campaign was one of the first strategies implemented by the Australian Sports Commission in 1986 to increase participation. The campaign led to a range of programs funded under the Aussie Sport Strategy including an early years' program, Sportstart. Sportstart was a book designed for parents and caregivers to encourage movement activities and sport skills for children aged 3-12.

Figure 16 depicts the range of programs that were included in the Aussie Sport Strategy, its focus on having fun aligned naturally with the play-based learning and development that occurs in the early years.

Figure 16 Sportslink strategy – Aussie Sport campaign 1992



Since then, physical activity has continued to be an important part of government strategies to support early learning and development. The Australian Government *Get Up and Grow* [172] [173] strategy described how physical activity, as well as healthy eating, could be supported in early childhood education and care. It complemented the National Physical Activity Recommendations for Children 0 to 5 Years (since superseded by the Australian 24-Hour Movement Guidelines for the Early Years). While organised sport might not feature strongly in the early years, the strategy showed how important physical activity is – even starting from “tummy time” for babies – in building skills to support participation in lifelong physical activity. This message is reinforced in the Early Years Learning Framework [174], which emphasises the importance of physical activity for fun and purpose, and of supporting young children to learn about healthy lifestyles.

Development of fundamental motor skills during these early years is critical to a child’s physical development and has the potential to deter or encourage participation in sport later in life [176]. The building blocks for fundamental motor skills, such as balancing, throwing, catching and kicking, are skills children need to participate in sport and games that require more advanced movements. Fundamental motor skills proficiency is associated with higher levels of physical activity in childhood and is an indicator of physical activity in adolescents [177]. Conversely, children who lack fundamental motor skills proficiency have lower sport participation and decreased enjoyment of sport [174]. The last decade of research has highlighted the importance of promoting fundamental motor skills in the early years [178, 179].

Despite the policy attention to these issues, more can still be done to promote physical activity in the early years. In a review undertaken in 2017-18 for the then Australian Sports Commission by the Mitchell Institute and Australian Health Policy Collaboration [180] the following elements were recommended for the development of a nationally consistent approach to fundamental motor skills for all children:

- better address physical activity in early childhood education and care settings in the National Quality Framework and its implementation, especially in relation to balancing risk with opportunities for movement;
- improve content related to physical movement, play and risk in training packages for early childhood educator qualifications, both in university and in Vocational Education Training (VET);
- improve collection of data relating to the physical activity and health of 2 to 5 year olds; and
- encourage state-based and municipal planning authorities to consider physical activity and movement in planning design (relevant to and beyond 0-5 age group).

Issues addressed

- Physical activity tracks with age, therefore a focus on developing fundamental movement skills and physical activity promotion in childhood are key to maintaining physical activity over the life course.
- Development of fundamental motor skills during these early years is critical to a child's physical development and has the potential to deter or encourage participation in sport later in life.
- Addresses *Sport 2030* goal: future generations will be more physically active and better prepared with the skills and knowledge to live healthy, active lives.

Expected outcomes

- Improved fundamental movement skills in childhood leads to ongoing participation in physical activity into adulthood.

Policy objective: build the capacity of sporting organisations and clubs

Australia's strong sense of loyalty to sporting clubs, commonly as passive observers, can be built on to improve population health outcomes by encouraging and supporting increased participation in sport clubs. International and Australian research shows that sporting organisations and sport stadia are opportunities to intervene and promote health promoting messages and programs [175, 176]. Professional sporting clubs should be encouraged to assist in delivering health promoting programs for improved population health outcomes.

Enabling strategy 1: establish an outreach program for implementation by sporting organisations and clubs

The current funding model does not support or enable sport participation in a non-traditional style of delivery. Currently, Sport Australia funds three major components of sport:

1. Participation
2. High performance able
3. High performance para

Participation is enabled by a combination of factors, including attention to the barriers to participation that affect significant groups within the Australian community. Evaluation of the UK StreetGames program found that an outreach program was a key component to the success in getting disadvantaged youth involved in sport [177]. Whilst the main aim was to encourage sport participation, StreetGames also built capacity in disadvantaged youth by exposing and providing opportunities to volunteer and build peer and social networks.

There is overwhelming evidence towards adopting a place-based approach to redress barriers resulting from socioeconomic and related aspects of disadvantage. Traditionally, policy responses to reducing disparities in communities of disadvantage have been to make existing support services more accessible either to or within the communities. This, however, has been found to be an insufficient response [178]. It has become evident that effective policy intervention should identify local needs and take a place-based approach that focuses on the social and physical environments within a community and on better integration and accessibility of service systems [179].

Based on the successful UK StreetGames model, outreach programs for Australian sports could:

- Target communities at highest risk of inactivity
- Target disadvantaged and low socio-economic communities
- Employ a community sport advisor to provide central support
- Partner with a local agency or agencies for local delivery

Sport Australia has recently indicated a change in the funding to national sport organisations. This announcement states:

“future allocations will include ‘impact funding’ which will be invested to drive outcomes in focus areas such as increased levels of physical activity, enhanced workforce capability and business capability” [180]

Sport Australia should continue to be the agency to manage a national grants program for all local communities to collaborate in the development of local outreach programs to encourage sport participation. Tranche one of the grants program should fund local areas with high rates of physical inactivity to trial new and/or expand on initiatives to increase sport participation. The Australian Health Policy Collaboration in 2018 also proposed a similar model to increase levels of physical activity among school-aged children through active travel [181].

Issues addressed

- The current funding model does not support or enable sport participation in a non-traditional style of delivery.
- Evidence supports policy interventions that identify local needs and take a place-based approach that focuses on the social and physical environments within a community and on better integration and accessibility of service systems.
- Addresses *Sport 2030* goal for a diverse and inclusive sport and physical activity sector that supports more Australians to be more active more often, creating a stronger and healthier Australia where as many people as possible see and feel the benefits of sport and physical activity through every stage of their lives.

Expected outcomes

- The development of local outreach programs through the appointment of community sport advisors and in collaboration with local communities will encourage sport participation, particular among hard to reach groups and those most at risk of being inactive.
- Co-design with communities, or support existing sporting activities, will lead to increased engagement, frequency and retention within groups in the community with very low levels of engagement in traditional sports.

Enabling strategy 2: build up the influence of sport clubs in health

What is the strategy?

In 2013, the Scottish Professional Football League designed an innovative approach to address the rising rates of overweight and obesity in Scotland. The Football Fans in Training (FFIT) program is a healthy living and weight loss program strategically designed to appeal to men aged 35-65 years. Evaluations of FFIT has shown the program to be highly successful. Men who did the 12 week program:

- lost 4.94kg more weight than men in the comparison group;
- had lower waist size;
- had a lower percentage body fat and blood pressure; and
- reported higher levels of physical activity, better diets and better self-report health [176].

The Football Fans in Training program tapped into the potential and influence of professional football clubs as the vehicle of engagement to impact health outcomes. As described on the website:

“it was hoped that by using professional football clubs as a setting for a weight management group, men’s loyalty to their football team would encourage them to sign up”

Led by a top community coach at Scotland’s top professional football club, the 12 week program consists of sessions at local clubs to educate and learn skills and techniques around diet and physical activity.

The Australian Government’s Australian National Preventive Health Agency (2011-2014) recognised sporting clubs as an environment and setting for (preventative) action in its preventative health system framework [182]. The National Preventive Health Agency funded 17 national sporting organisations to run a series of anti-binge drinking health promotion programs. In addition, the *Be The Influence – Tackling Binge Drinking* national campaign aimed to reduce harmful binge drinking culture especially among young people. The strategy included stadium signage, uniform insignia, stadium announcements and programs, social media and websites and used athlete ambassadors to convey the message. This resulted in more than one million young Australians participating in or watching sport free from alcohol promotion [183]. The relationship and influence sport has and could have, on many Australians should be considered as an effective strategy to improve population health outcomes. Promotion of additional health behaviours such as healthy eating, physical activity and tobacco cessation could also be incorporated as part of sport policy.

The Sons of the West Program is a preventative health program developed by the Western Bulldogs Australian Football League (AFL) club. Established in 2014 and now in its fifth year of delivery, this program has leveraged the Western Bulldogs brand and strong local community engagement to help men learn and improve their health and wellbeing. There is global awareness of the challenges related to men’s health [184, 185]. Men are known to be less likely to engage with health services [186], seek help or take preventative measures [187]. Recent research (2017) suggests that gender-specific strategies and sport-theme spaces are opportunities for men to socialise and learn about positive health behaviours [184]. The Sons of the West program targets men aged 18 years and over and partners with various local councils in Melbourne’s western region and was developed in alliance with the Liverpool FC

Foundation – the community arm of Liverpool FC, a football team in the English Premier League that established and maintains a similar community program [188]. In 2017, the Daughters of the West program was piloted – taking a similar approach to the men’s program.

The 2018 evaluation of the Sons of the West Program found that it is an effective health promotion program. Participants not only increased their knowledge around health literacy but were more likely to make positive changes to their health behaviours [189]. In addition to health-related behaviours such as sustained physical activity, participants’ psychological wellbeing improved and their sense of willingness to contribute to the community also increased.

Another AFL club, North Melbourne Football Club delivers a range of initiatives in sport and recreation, education and careers, digital skills and civic participation through its community arm – The Huddle – to engage, support and empower young people in their community. Located in Melbourne’s north-west corridor, a rich and growing community in Victoria, The Huddle’s programs have a strong focus on engaging with young people from low socio-economic backgrounds. Several programs provided by The Huddle demonstrate how sporting clubs can mobilise more people to participate in sport. The Drop-in Sports program is a free, casual program aimed to get young people engaging in sport. As the program name suggests, young people are encouraged to ‘drop-in’ to their local sporting facility for free access to equipment and courts. This program is currently established in two local councils in Melbourne, operating once a week to give young people the opportunity to access sport facilities outside of school hours. Additionally, Active Girls and Active Boys programs’ take a similar approach to the Drop-In program and provides a range of sports for girls and separately, for boys to participate in free, flexible and fun sport. Both programs also provide the skills and knowledge to lead a healthy lifestyle.

Several evaluations demonstrate the success of the Australian Drug Foundation’s Good Sports Program in assisting sporting clubs to become healthier, safer and more family-friendly places [190, 191]. This program, designed and built upon the evidence-base, takes a staged approach to support the club’s readiness to change and helps the club make progressive improvements. Initially established to reduce harms related to alcohol and drugs, the programs has extended to include healthy eating and healthy minds.

The National Rugby League (NRL) State of Mind program [192] uses the game’s reach, profile, clubs and players, and events to highlight mental illness and importantly, reduce the stigma around mental illness. This community program is established across several States and Territories and has been developed in partnership with a number of mental health services. State of Mind aims to increase mental health literacy and build community awareness and local networks for people experiencing mental health issues or who have friends or families living with a mental health issue; educate and build connections to services.

Issues addressed

- Sport clubs identified as an appropriate setting for health promotion and prevention.
- Promotion of additional health behaviours such as healthy eating, physical activity and tobacco cessation could be incorporated as part of sport policy.
- Addresses *Sport 2030* goal of and leveraging sport for social benefits.

Expected outcomes

- Sport utilises its influence as a setting to improve population health outcomes through implementation of health promotion initiatives that focus on healthy eating, smoking cessation, and physical inactivity.

Conclusion

This policy paper responds to the policy objectives and strategies in Australia's sport plan, *Sport 2030*. It identifies opportunities and links health and sport policy to support greater sport participation for all Australians. It has been developed with input from leading sport and health experts and focuses on achieving the vision of *Sport 2030*.

References

1. Commonwealth of Australia. *Sport plan for a healthy, active and successful Australia*. 2018 1 August 2018 [cited 2018 25 September]; Available from: <http://www.health.gov.au/internet/ministers/publishing.nsf/Content/health-medialrel-yr2018-mckenzie055.htm>.
2. Commonwealth of Australia, *National Sport and Active Recreation Policy Framework*. 2011.
3. Berg, B.K., S. Warner, and B.M. Das, *What about sport? A public health perspective on leisure-time physical activity*. *Sport Management Review*, 2015. **18**(1): p. 20-31.
4. World Health Organization, *Global action plan on physical activity 2018–2030: more active people for a healthier world*, in *Noncommunicable diseases and their risk factors*. 2018, WHO: Geneva.
5. Australian Government, *Sport 2030*. 2018, Commonwealth of Australia: Canberra.
6. McNamara, K., et al., *Absolute Risk Screening in Pharmacy Report to the National Heart Foundation of Australia*. 2015.
7. Eime, R.M., et al., *Population levels of sport participation: implications for sport policy*. *BMC Public Health*, 2016. **16**(1): p. 752.
8. Blair, S.N., *Physical inactivity: the biggest public health problem of the 21st century*. *British Journal of Sports Medicine*, 2009. **43**(1): p. 1-2.
9. International Society for Physical Activity and Health, *Non communicable disease prevention: Investments that Work for Physical Activity*. 2011.
10. Tolhurst, P., Lindberg, R., Calder, R., Dunbar J., de Courten M., *Australia's Health Tracker*. 2016, The Australian Health Policy Collaboration, Victoria University: Melbourne.
11. Australian Bureau of Statistics. (2015). 4364.0.55.001-National Health Survey: first results, 2014-15, Key Findings. 2015.
12. BCG, *Economic Modelling of Sport* 2016, as cited in the Intergenerational Review of Australian Sport 2017.
13. Commonwealth of Australia, *2015 Intergenerational Report: Australia in 2055*. 2015, Department of the Treasury: Canberra.
14. Clearinghouse for Sport. *Volunteers in Sport*. 2018; Available from: https://www.clearinghouseforsport.gov.au/knowledge_base/sport_participation/community_participation/volunteers_in_sport.
15. Eime, R.M., et al., *The contribution of sport participation to overall health enhancing physical activity levels in Australia: a population-based study*. *BMC Public Health*, 2015. **15**: p. 806.
16. Centers for Disease Control and Prevention. *Physical Activity and Health*. 2015 June 4 2015 [cited 2018 9 Feb 2018]; Available from: <https://www.cdc.gov/physicalactivity/basics/pa-health/index.htm>.
17. Buchman, A.S., et al., *Physical activity, common brain pathologies, and cognition in community-dwelling older adults*. *Neurology*, 2019: p. 10.1212/WNL.0000000000006954.
18. World Health Organization. *Global recommendations on physical activity and health*. 2010 [cited 2014 20th April]; Available from: http://whqlibdoc.who.int/publications/2010/9789241599979_eng.pdf.
19. Wen, C.P., et al., *Minimum amount of physical activity for reduced mortality and extended life expectancy: a prospective cohort study*. *The Lancet*, 2011. **378**(9798): p. 1244-1253.
20. Australian Institute of Health and Welfare, *Impact of physical inactivity as a risk factor for chronic conditions: Australian Burden of Disease*, in *Burden of Disease*. 2017, AIHW: Canberra.

21. Zhou, R. and K. Kaplanidou, *Building social capital from sport event participation: An exploration of the social impacts of participatory sport events on the community*. Sport Management Review, 2017.
22. Skinner, J., D.H. Zakus, and J. Cowell, *Development through Sport: Building Social Capital in Disadvantaged Communities*. Sport Management Review, 2008. **11**(3): p. 253-275.
23. Eime, R.M., et al., *A systematic review of the psychological and social benefits of participation in sport for adults: informing development of a conceptual model of health through sport*. The international journal of behavioral nutrition and physical activity, 2013. **10**(1): p. 135-135.
24. Sport England, *Active lives adult survey. Mental wellbeing, individual and community development analysis (May 16-17)*. 2017, Sport England: England.
25. Eime, R., et al., *A systematic review of the psychological and social benefits of participation in sport for adults: Informing development of a conceptual model of health through sport*. International Journal of Behavioral Nutrition & Physical Activity, 2013. **10**(135).
26. Eime, R.M., et al., *A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport*. International Journal of Behavioral Nutrition and Physical Activity, 2013. **10**(1): p. 98.
27. Committee on Physical Activity and Physical Education in the School Environment, *Educating the Student Body: Taking Physical Activity and Physical Education to School*. Physical Activity and Physical Education: Relationship to Growth, Development, and Health., ed. Food and Nutrition Board Institute of Medicine; Kohl HW III Cook HD. 2013, Washington (DC): National Academies Press (US).
28. Eime, R., et al., *Does Sports Club Participation Contribute to Health-Related Quality of Life?* Med Sci Sports Exerc, 2009. **42**: p. 1022-8.
29. Gayman, A., et al., *Is sport good for older adults? A systematic review of psychosocial outcomes of older adults' sport participation*. International Review of Sport and Exercise Psychology, 2017. **10**(1): p. 164-185.
30. Jenkin, C.R., et al., *Sport and ageing: a systematic review of the determinants and trends of participation in sport for older adults*. BMC Public Health, 2017. **17**(1): p. 976.
31. Donaldson, S.J. and K.R. Ronan, *The effects of sports participation on young adolescents' emotional well-being*. Adolescence, 2006. **41**(162): p. 369-389.
32. Moeijes, J., et al., *Sports participation and psychosocial health in elementary school children*. Health behaviour policy review, 2017. **4**(6): p. 582-592.
33. Harrison, P.A. and G. Narayan, *Differences in Behavior, Psychological Factors, and Environmental Factors Associated with Participation in School Sports and Other Activities in Adolescence*. Journal of School Health, 2003. **73**(3): p. 113-120.
34. Bradley, J., F. Keane, and S. Crawford, *School Sport and Academic Achievement*. Journal of School Health, 2013. **83**(1): p. 8-13.
35. London, R.A. and S. Castrechini, *A Longitudinal Examination of the Link Between Youth Physical Fitness and Academic Achievement*. Journal of School Health, 2011. **81**(7): p. 400-408.
36. Kotschwar, B. and K. Stahler, *Level the Playing Field to Bolster the Boardroom: Sports as a Springboard for Women's Labor Force Advancement in Asia*. Asian Economic Policy Review, 2016. **11**(1): p. 117-134.
37. EY Women Athletes & espnW, *Where will you find your next leader?*, in *Women. Fast forward*. 2015, EY.
38. Australian Sports Commission. *National Sports Plan*. 2017; Available from: <https://www.ausport.gov.au/nationalsportsplan>.
39. Australian Sports Commission, *Investment allocation 2017-18*. n.d.
40. Australian Government, *Australian Sport the pathway to success*. 2010.

41. Office of Sport. *Active Kids FAQs*. n.d. [cited 2019 15 March]; Available from: <https://sport.nsw.gov.au/sectordevelopment/activekids/faqs>.
42. Office of Sport, *Ministerial media release: Active Kids - \$100 for every child to play sport*. 2018: Sydney.
43. Department of Planning Transport and Infrastructure. *Support sport and recreation through the development of policy, programs and resources and the promotion of physical activity*. Sport and Recreation n.d. [cited 2019 15 March]; Available from: https://dpti.sa.gov.au/annual_report/2014-15/highlights/sports_and_recreation.
44. Good Sports. *Grants Calendar*. [cited 2019 15 March]; Available from: <https://goodsports.com.au/grants-calendar/>.
45. Sport and Recreation Victoria. *Sporting club grants program*. 2019 20/02/2019 [cited 2019 15 March]; Available from: <http://sport.vic.gov.au/grants-and-funding/our-grants/sporting-club-grants-program>.
46. Department of Local Government Sport and Cultural Industries. *Community programs and initiatives*. n.d. [cited 2019 15 March]; Available from: <http://www.dsr.wa.gov.au/support-and-advice/participation/special-initiatives>.
47. Leo Saac. *Structure of Sport in Australia*. n.d. [cited 2019 15 March]; Available from: <http://www.leoisaac.com/hrm/hrm001.htm>.
48. Australian Government, *Australian Sport: emerging challenges, new direction*. n.d., Department of Health.
49. Australian Government Independent Sport Panel, *The future of sport in Australia*. 2009.
50. Government of Western Australia Department of Health. *Public Health Planning*. n.d.; Available from: <https://ww2.health.wa.gov.au/Improving-WA-Health/Public-health/Public-Health-Act/Preparing-local-government-enforcement-agencies/Public-Health-Planning>.
51. Government of Western Australia, *Sport and Recreation and Public Health: A resource for community sector professionals working in local government*. 2016, Department of Sport and Recreation: Perth, Western Australia.
52. Phillips, J.A. and D.R. Young, *Past-year sports participation, current physical activity, and fitness in urban adolescent girls*. *Journal of physical activity & health*, 2009. **6**(1): p. 105-111.
53. World Health Organization Regional Office for Europe, *Promoting sport and enhancing health in European Union countries: a policy content analysis to support action*,. 2011.
54. Sport England, *Sport England: Towards an Active Nation Strategy 2016-2021*. 2016.
55. UK Government, *Sporting Future: A New Strategy for an Active Nation*. 2015: London.
56. Waardenburg, M. and M. van Bottenburg, *Sport policy in the Netherlands*. *International Journal of Sport Policy and Politics*, 2013. **5**(3): p. 465-475.
57. World Health Organization Regional Office for Europe, *Netherlands Physical Activity Factsheet*,. n.d.
58. Kenniscentrum sport. *Youth Sports Fund Netherlands*. Participation, Health and Sport for All 2016; Available from: <https://tools.kenniscentrumsport.nl/sportfolio-internationaal/onderwerp/youth-sports-fund-netherlands/>.
59. Dutch Sport Council, the Council for Community Health and Society, and the Education Council, *Plezier in Bewegen (it is fun to move)*. 2018.
60. Ministry of Education and Culture. *Policies and development*. n.d.; Available from: <http://minedu.fi/en/policies-and-development-sport>.
61. Prime Minister's Office Finland, *Finland, a land of solutions: Strategic Programme of Prime Minister Juha Sipilä's Government*. 2015.
62. Ministry of Social Affairs and Health, *On the Move - National Strategy for physical activity promoting health and wellbeing 2020*. 2013, Ministry of Social Affairs and Health,: Finland.

63. World Health Organization Regional Office for Europe, *Finland Physical Activity Factsheet*. n.d., World Health Organization.
64. Sport and Recreation South Africa Republic of South Africa, *The White Paper on Sport and Recreation for the Republic of South Africa*. 2012.
65. Sport and Recreation South Africa Republic of South Africa, *National Sport and Recreation Plan*. 2011.
66. Angus & Associates, *The Value of Sport*. 2017, Sport New Zealand.
67. Ding, D., et al., *The economic burden of physical inactivity: a global analysis of major non-communicable diseases*. *The Lancet*, 2016. **388**(10051): p. 1311-1324.
68. Sport New Zealand, *Annual Report 2017*. 2017, Sport New Zealand: Wellington.
69. Sport New Zealand. *He Oranga Poutama*. 2018; Available from: <https://sportnz.org.nz/managing-sport/search-for-a-resource/programmes-and-projects/he-oranga-poutama>.
70. McKegg, K., et al., *He Oranga Poutama: What we have learned. A report on the developmental evaluation of He Oranga Poutama*. 2013, Wellington: Sport New Zealand.
71. Confederation of Australian Sport, *Pre-budget summary to treasury For consideration for the 2018-19 Federal Budget: Health, Education and Sport Cross-sector Collaboration on Physical Activity*. 2017: Canberra.
72. Kohl, H.W., Craig, C.L., Lambert, E.V., Inoue, S., Alkandari, J.R., Leetongin, G., Kahlmeier, S. and the Lancet Physical Activity Series Working Group,, *The pandemic of physical inactivity: global action for public health*. *The Lancet*, 2012. **380**(9838): p. 294-305.
73. Europa, *EU Physical Activity Guidelines Recommended Policy Actions in Support of Health-Enhancing Physical Activity*. 2008: Brussels.
74. World Health Organization. *WHO Director-General's speech at the summit on measurement and accountability for results in health*. 2015; Available from: <https://www.who.int/dg/speeches/2015/health-measurement-summit/en/>.
75. Calder, R., et al., *Better Data for Better Decisions*. 2018, Australian Health Policy Collaboration: Melbourne.
76. Australian Bureau of Statistics, *Australian Health Survey: Updated Results, 2011-12*. 2013, ABS: Canberra.
77. World Health Organization, *Health and Development Through Physical Activity and Sport*, in *World Health Organization Noncommunicable Diseases and Mental Health Noncommunicable Disease Prevention and Health Promotion*. 2003, WHO: Geneva, Switzerland.
78. Harris, B., H. Fetherston, and R. Calder, *Australia's Health Tracker by Socio-Economic Status 2017*. 2017, Australian Health Policy Collaboration, Victoria University: Melbourne.
79. Gallant, F., et al., *Childhood sports participation and adolescent sport profile*. *Pediatrics* 2017. **140**: p. 6.
80. Makela, S., et al., *Diversity of leisure-time sport activities in adolescence as a predictor of leisure-time physical activity in adulthood*. *Scand J Med Sci Sports*., 2017. **27**(12): p. 1902-1912.
81. Eime, R., J. Harvey, and M. Charity, *Longitudinal trends in sport participation retention over a 7-year period*. *Research Quarterly for Exercise and Sport*, 2017. **Submitted 27th November, 2017**.
82. Erwin, H., et al., *A Quantitative Review of Physical Activity, Health, and Learning Outcomes Associated With Classroom-Based Physical Activity Interventions*. *Journal of Applied School Psychology*, 2012. **28**(1): p. 14-36.
83. Telford, R.M., et al., *Outcomes of a four-year specialist-taught physical education program on physical activity: a cluster randomized controlled trial, the LOOK study*. *International Journal of Behavioral Nutrition and Physical Activity*, 2016. **13**(1): p. 64.
84. Telford, R.D., et al., *Physical education can improve insulin resistance: the LOOK randomized cluster trial*. *Med Sci Sports Exerc*, 2013. **45**(10): p. 1956-64.

85. Telford, R.D., et al., *Physical Education and Blood Lipid Concentrations in Children: The LOOK Randomized Cluster Trial*. PLOS ONE, 2013. **8**(10): p. e76124.
86. Telford, R.D., et al., *Physical education, obesity, and academic achievement: a 2-year longitudinal investigation of Australian elementary school children*. Am J Public Health, 2012. **102**(2): p. 368-74.
87. Chesham, R.A., et al., *The Daily Mile makes primary school children more active, less sedentary and improves their fitness and body composition: a quasi-experimental pilot study*. BMC Medicine, 2018. **16**(1): p. 64.
88. Ryde, G.C., et al., *The Daily Mile: What factors are associated with its implementation success?* PLOS ONE, 2018. **13**(10): p. e0204988.
89. Urrea, N.M., *The Patient Navigator Outreach and Chronic Disease Prevention Act of 2005: A bipartisan approach to improving access to care and addressing health disparities*. Health Policy, 2009. **22**(2).
90. The King's Fund. *What is social prescribing?* 2017; Available from: <https://www.kingsfund.org.uk/publications/social-prescribing>.
91. Hamlin, M.J., et al., *Long-term effectiveness of the New Zealand Green Prescription primary health care exercise initiative*. Public Health, 2016. **140**: p. 102-108.
92. Healthy London Partnership, *Social prescribing - steps towards implementing self-care - a focus on social prescribing*. 2017, Supported by London NHS, Public Health England, Mayor of London: London.
93. Elley, C.R., et al., *Effectiveness of counselling patients on physical activity in general practice: cluster randomised controlled trial*. BMJ, 2003. **326**(7393): p. 793.
94. Garrett, S., et al., *Are physical activity interventions in primary care and the community cost-effective? A systematic review of the evidence*. British Journal of General Practice, 2011. **61**(584): p. e125-e133.
95. Curry, N., et al., *The Voluntary and Community Sector in Health: Implications of the Proposed NHS reforms*. 2011, The Kings Fund: London.
96. England National Health Service, *Universal Personalised Care, Making personalised care happen*. 2019, NHS: UK.
97. Torjesen, I., *Social prescribing could help alleviate pressure on GPs*. BMJ, 2016. **352**: p. i1436.
98. Huang, N., et al., *The Victorian Active Script Programme: promising signs for general practitioners, population health, and the promotion of physical activity*. Br J Sports Med, 2004. **38**(1): p. 19-25.
99. Insurance Business Australia. *icare backs 18-month social prescribing trail*. 2018.
100. Primary & Community Care. *Plus Social for Injured Workers*. n.d.
101. Craike, M., et al., *General practitioner referrals to exercise physiologists during routine practice: A prospective study*. J Sci Med Sport, 2019. **22**(4): p. 478-483.
102. Eime, R.M., et al., *The relationship of sport participation to provision of sports facilities and socioeconomic status: a geographical analysis*. Aust N Z J Public Health, 2017. **41**(3): p. 248-255.
103. Barghchi, M., *Sports Facilities in Urban Areas: Trends and Development Considerations*. Vol. 18. 2010. 427-435.
104. Sport & Recreation Spatial. *Sport and Recreation Spatial*. n.d. [cited 2019 09 April]; Available from: <http://www.sportandrecreationspatial.com.au/>.
105. Eime, R., et al., *Physical Activity, Sport and Health in the City of Brimbank*. 2014, Federation University Australia and Victoria University: Melbourne.
106. Eime, R.M., et al., *Age profiles of sport participants*. BMC Sports Science, Medicine and Rehabilitation, 2016. **8**: p. 6.
107. Harvey, J., R. Eime, and M. Charity, *Facility requirements calculator. Report prepared for Sport and Recreation Victoria*. 2018, Sport and Recreation Victoria.
108. Verity, C., et al., *Environmental barriers and enablers to physical activity participation among rural adults: a qualitative study*. Health Promotion Journal of Australia, 2015. **26**(2): p. 99-104.

109. City of Greater Geelong. *Sustainable Communities Infrastructure Development Guidelines*. 2016 [cited 2016; Available from: <https://geelongaustralia.com.au/common/public/documents/8cd43d63c2939a8-Sustainable%20Communities%20-%20Infrastructure%20Development%20Guidelines%20-%20June%202016.pdf>].
110. Victorian Government, *Female friendly sport infrastructure guidelines*, D.o.H.a.H. Services, Editor. 2017: Melbourne.
111. Queensland Government, *\$1.5 million for local sports infrastructure planning*. 2017: Queensland.
112. Northern Territory Government. *Sport and active recreation grants for facilities and equipment*. 2019 18 February 2019 [cited 2019 15 March]; Available from: <https://nt.gov.au/leisure/sport/Sport-and-active-recreation-grants-for-facilities-and-equipment>.
113. Kerr, J., D. Rosenberg, and L. Frank, *The Role of the Built Environment in Healthy Aging: Community Design, Physical Activity, and Health among Older Adults*. Journal of Planning Literature, 2012. **27**(1): p. 43-60.
114. Schutzer, K.A. and B.S. Graves, *Barriers and motivations to exercise in older adults*. Preventive Medicine, 2004. **39**(5): p. 1056-1061.
115. AARP, 8 80 cities, and The Trust for Public Land, *Creating Parks and Public Spaces for People of All Ages*. 2018, AARP: Washington DC.
116. *Edinburgh kids to reclaim streets for outdoor play*, in BBC. 2018, BBC: Scotland.
117. Brimbank City Council, *Supporting our vision for a multi-generational health and wellbeing hub*. 2018.
118. Payne, D., *An Evidence Base for Sports Facilities in London – the basis for Strategic Sports Facilities Planning Across London*. 2010, Sport England and the Greater London Authority.
119. Department of Education and Training. *Community use of school facilities*. 2017 [cited 2019 March 15]; Available from: <http://ppr.det.qld.gov.au/corp/infrastructure/facilities/Procedure%20Attachments/community-use-of-school-facilities/community-use-of-school-facilities.pdf>.
120. NSW Department of Education. *Community use of school facilities*. 2017 [cited 2019 March 15]; Available from: https://education.nsw.gov.au/policy-library/associated-documents/imp_comm_use.pdf.
121. Department of Education and Early Childhood Development. *How to share school facilities*. 2010 [cited 2019 March 15]; Available from: <https://www.education.vic.gov.au/Documents/school/principals/community/berfssharefacil.pdf>.
122. Department of Education. *Community Use of School Facilities*. 2013 [cited 2019 March 15]; Available from: https://education.nt.gov.au/__data/assets/pdf_file/0005/444740/Community-Use-of-School-Facilities-Policy_v-2-0.pdf.
123. Heart Foundation. *Community Facilities* 2018 [cited 2019 15 March]; Available from: <http://www.healthyactivebydesign.com.au/design-features/community-facilities/health-and-physical-activity-impact/>.
124. Department of Planning and Community Development, *A Guide to Governing Shared Community Facilities*. 2010, Victorian Government: Melbourne.
125. City of Boroondara, *Sport and Recreation Strategy*, Community Development, Editor. 2016: Victoria.
126. Eime, R., J. Harvey, and M. Charity, *Sport Participation Rates - Victoria 2016*. 2018, Federation University, Victoria University.
127. Office for Recreation and Sport, *Working with local government: A guide for sport and recreation organisations*. 2013.
128. Sport and Recreation, *Active 2020 - A Strategic Plan for Sport and Active Recreation in the ACT & Region 2011-2020*. 2019, ACT Government: Canberra.

129. World Health Organization. *Healthy urban planning*. Health and sustainable development n.d. [cited 2018 3 October 2018]; Available from: <http://www.who.int/sustainable-development/cities/strategies/urban-planning/en/>.
130. Lowe, M., C. Whitzman, and B. Giles-Corti, *Health-Promoting Spatial Planning: Approaches for Strengthening Urban Policy Integration*. Planning Theory & Practice, 2018. **19**(2): p. 180-197.
131. Christiansen, L.B., et al., *International comparisons of the associations between objective measures of the built environment and transport-related walking and cycling: IPEN Adult Study*. J Transp Health, 2016. **3**(4): p. 467-478.
132. Nabil, N.A. and G.E.A. Eldayem, *Influence of mixed land-use on realizing the social capital*. HBRC Journal, 2015. **11**(2): p. 285-298.
133. Keeley, B., *Human Capital*. 2007.
134. Osborne, C., C. Baldwin, and D. Thomsen, *Contributions of Social Capital to Best Practice Urban Planning Outcomes*. Urban Policy and Research, 2016. **34**(3): p. 212-224.
135. Frank, L., S. Kavage, and L. Todd, *Promoting public health through smart growth*. 2006: Vancouver Canada.
136. Wood, L., et al., *The anatomy of the safe and social suburb: An exploratory study of the built environment, social capital and residents' perceptions of safety*. Health & Place, 2008. **14**(1): p. 15-31.
137. World Health Organization, *Promoting physical activity and active living in urban environments - the role of local governments*, in *The Solid Facts*. 2006, The Regional Office for Europe of the World Health Organization: Turkey.
138. Okayasu, I., Y. Kawahara, and H. Nogawa, *The role of social capital in community sport settings in Japan*. Asia Pacific Journal of Sport and Social Science, 2015. **4**(2): p. 167-177.
139. Hoye, R. and M. Nicholson, *Social Capital And Sport Policies In Australia*. Public Management Review, 2009. **11**(4): p. 441-460.
140. Australia Bureau of Statistics, *Participation in Sport and Physical Recreation, Australia, 2013-14 (Cat no. 4177.0)*. 2015.
141. Allender, S., G. Cowburn, and C. Foster, *Understanding participation in sport and physical activity among children and adults: a review of qualitative studies*. Health education research, 2006. **21**(6): p. 826-835.
142. O'Dea J, A., *Why do kids eat healthful food? Perceived benefits of and barriers to healthful eating and physical activity among children and adolescents*. J Am Diet Assoc, 2003. **103**(4): p. 497-501.
143. Cerar, K., et al., *Exercise Participation Motives and Engaging In Sports Activity among University of Ljubljana Students*. Open Access Macedonian Journal of Medical Sciences, 2017. **5**(6): p. 794-799.
144. Eime, R. and J. Harvey, *Sport participation across the lifespan: Australian trends and policy implications*, in *Sport and physical activity across the lifespan*, R. Dionigi and M. Gard, Editors. 2018, Palgrave Macmillan: UK. p. 23-43.
145. Federico, B., et al., *Socioeconomic differences in sport and physical activity among Italian adults*. Journal of Sports Sciences, 2012. **31**(4): p. 451-458.
146. Steenhuis, I., et al., *Financial barriers and pricing strategies related to participation in sports activities: The perceptions of people of low income*. Journal of Physical Activity and Health, 2009. **6**: p. 716-721.
147. Holt, N.L., et al., *Benefits and challenges associated with sport participation by children and parents from low-income families*. Psychology of Sport and Exercise, 2011. **12**(5): p. 490-499.
148. VicHealth, *Understanding barriers to sport participation*, in *Insight for key VicHealth target segments*. 2009, VicHealth: Melbourne.
149. Somerset, S. and D.J. Hoare, *Barriers to voluntary participation in sport for children: A systematic review*. BMC Pediatrics, 2018. **18**(1).

150. Australian Institute of Health and Welfare, *Australia's Health 2016*. 2016, AIHW: Canberra.
151. Commission on Social Determinants of Health, *Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health*. 2008, Geneva: World Health Organisation.
152. The Health Foundation, *What makes us healthy? An introduction to the social determinants of health*. 2018.
153. Wright, E.M., K.R. Griffes, and D.R. Gould, *A Qualitative Examination of Adolescent Girls' Sport Participation in a Low-Income, Urban Environment*. *Women in Sport & Physical Activity Journal*, 2017. **25**(2): p. 77-88.
154. VicHealth. *Chanigng the Game: Increasing Female Participation in Sport Initiative*. 2018 05 Nov 2018 [cited 2019 10 April]; Available from: <https://www.vichealth.vic.gov.au/programs-and-projects/increasing-female-participation-in-sport-initiative>.
155. UN Women. "*Sport has huge potential to empower women and girls*" - Lakshmi Puri. 2016 Feb 16 2016; Available from: <http://www.unwomen.org/en/news/stories/2016/2/lakshmi-puri-speech-at-value-of-hosting-mega-sport-event>.
156. Rowe, D., *Women in Sport, Gender in Society*, in *GradLife*, Western Sydney University, Editor. 2016: Western Sydney University.
157. Jenkin, C., et al., *Are they 'worth their weight in gold'? Sport for older adults: benefits and barriers to their participation for sporting organisations*. *International journal of sport policy and politics*, 2016. **8**: p. 663-680.
158. Eime, R., et al., *Participation in modified sports programs: A longitudinal study of children's transition to club sport participation*. *Journal of Science and Medicine in Sport*. **19**: p. e33.
159. Eime, R., J. Harvey, and M. Charity, *Girls' transition from participation in a modified sport program to club sport competition - a study of longitudinal patterns and correlates*. *BMC Public Health*, 2018. **18**(1): p. 718.
160. Clearinghouse for Sport. *Modified Sports*. 2017; Available from: https://www.clearinghouseforsport.gov.au/knowledge_base/sport_participation/Sport_a_new_fit/modified_sports.
161. Pressick, E.L., et al., *A systematic review on research into the effectiveness of group-based sport and exercise programs designed for Indigenous adults*. *Journal of Science and Medicine in Sport*, 2016. **19**(9): p. 726-732.
162. Kiuppis, F., *Inclusion in sport: disability and participation*. *Sport in Society*, 2018. **21**(1): p. 4-21.
163. VicHealth. *Innovation Challenge: Sport winners*. 2015-18 Challenge Winners 2019 28 Feb 2019 [cited 2019 08 April]; Available from: <https://www.vichealth.vic.gov.au/programs-and-projects/winners-sport-challenge>.
164. Bowls Victoria. *Bowling with Babies*. n.d. [cited 2019 08 April]; Available from: <https://www.bowlsvic.org.au/bowling-with-babies/>.
165. Harris, B. and W.-K. Chislett. *How support groups can boost your health and make chronic conditions easier to live with*. 2018 July 6 2018 [cited 2019 08 April]; Available from: <https://theconversation.com/how-support-groups-can-boost-your-health-and-make-chronic-conditions-easier-to-live-with-91756>.
166. Jenkin, C.R., R. Eime, and T. Hilland, *Walking Basketball Program: Evalation Report for Basketball Victoria*. 2018, Basketball Victoria: Victoria.
167. Doorstep Sportclub, *Insight into Action The Lessons from the Doorstep Sport Club Programme 2013-2017*. n.d., Sport England.
168. Parliament of Australia. *Sports funding: federal balancing act*. 2013 27 June 2013 [cited 2019 18 March]; Available from: https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BN/2012-2013/SportFunding#_Toc360096380.

169. Australian Sports Commission, *AusPlay Participation data for the sport sector*. 2016, ASC.
170. Kondric, M., et al., *Participation Motivation and Student's Physical Activity among Sport Students in Three Countries*. *Journal of sports science & medicine*, 2013. **12**(1): p. 10-18.
171. Visek, A.J., et al., *The fun integration theory: toward sustaining children and adolescents sport participation*. *Journal of physical activity & health*, 2015. **12**(3): p. 424-433.
172. Commonwealth of Australia, *Get up & Grow 2009*: Canberra. p. 92.
173. Australian Government, *Guidelines for healthy growth and development for your child*,. n.d.
174. Australian Government. *Early Years Learning Framework*. 2017 19 October 2017 [cited 2019 March 18]; Available from: <https://www.education.gov.au/early-years-learning-framework-0>.
175. Ruszkowska, J., et al., *Good practices and health policy analysis in European sports stadia: results from the 'Healthy Stadia' project*. Health Promotion International, 2011. **28**(2): p. 157-165.
176. Hunt, K., et al., *A gender-sensitised weight loss and healthy living programme for overweight and obese men delivered by Scottish Premier League football clubs (FFIT): a pragmatic randomised controlled trial*. *Lancet (London, England)*, 2014. **383**(9924): p. 1211-1221.
177. StreetGames, *Changing Sport Changing Communities and Changing Lives: StreetGames National Evaluation*. 2015: Manchester, UK.
178. Klein, H., *Health inequality, social exclusion and neighbourhood renewal: Can place-based renewal improve the health of disadvantaged communities?* *Australian Journal of Primary Health*, 2004. **10**(3): p. 110-119.
179. The Royal Children's Hospital Melbourne, *Place-based approaches to supporting children and families*, in *Translating early childhood research evidence to inform policy and practice*. 2011: Melbourne.
180. Australia, S. *National Sporting Organisation (NSO) Investment 2018-19*. Grants and Funding n.d. [cited 2018 2 October 2018]; Available from: https://www.sportaus.gov.au/grants_and_funding/investment_announcements.
181. Duggan, M., et al., *Active School Travel: Pathways to a Healthy Future*. 2018, Australian Health Policy Collaboration, Victoria University: Melbourne, Victoria.
182. Australian National Preventative Health Agency (ANPHA), *State of Preventive Health*, in *Report to the Australian Government Minister for Health*. 2013, ANPHA: Canberra.
183. Australian National Preventative Health, A., *State of preventive health 2013*. 2013: Canberra.
184. Lefkowich, M., N. Richardson, and S. Robertson, "If We Want to Get Men in, Then We Need to Ask Men What They Want": *Pathways to Effective Health Programing for Men*. *American Journal of Men's Health*, 2017. **11**(5): p. 1512-1524.
185. Baker, P., et al. *The men's health gap: men must be included in the global health equity agenda*. *Perspectives* 2014 [cited 2019 10 April]; Available from: <https://www.who.int/bulletin/volumes/92/8/13-132795/en/>.
186. Smith, J.A., A. Mayer-Braunack, and G. Wittert, *What do we know about men's help-seeking and health service use?* *The Medical Journal of Australia*, 2006. **184**(2): p. 81-83.
187. Institute of Public Health in Ireland, *Facing the challenge: the impact of recession and unemployment on men's health in Ireland*. 2011, The Institute of Public Health in Ireland: Dublin.
188. VicHealth, *Western Bulldogs team up with Liverpool FC for Men's Health*. 2014, VicHealth: Melbourne.

189. Vassallo, J., et al., *Western Bulldogs Community Foundation Sons of the West Program Evaluation 2018*. 2018, Institute for Health & Sport, Victoria University. Western Bulldogs Community Foundation: Melbourne.
190. Rowland, B., F. Allen, and J.W. Toumbourou, *Association of risky alcohol consumption and accreditation in the 'Good Sports' alcohol management programme*. *Journal of Epidemiology and Community Health*, 2012. **66**(8): p. 684-690.
191. Duff, C. and G. Munro, *Preventing Alcohol-Related Problems in Community Sports Clubs: The Good Sports Program*. Vol. 42. 2007. 1991-2001.
192. National Rugby League. *State of Mind*. 2019 [cited 2019 09 April]; Available from: <https://www.nrl.com/community/state-of-mind/>.



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