

# Consultation on the development of a National Sports Plan for Australia

---

Submission from the Charles Perkins Centre, The University of Sydney

---

# Covering Letter from Professor Steve Simpson

31 July 2017

## Development of the National Sports Plan

I am pleased to provide for your consideration our submission to the consultation on the National Sports Plan.

The submission draws on the expertise of several research and policy experts based here at The Charles Perkins Centre, University of Sydney. The analysis and recommendations are provided by a team drawn from the *World Health Organization Collaborating Centre for Physical Activity, Nutrition and Obesity* (WHOCCPANO), The *Sport and Active Recreation Intervention and Epidemiology Research* (SPRINTER) Group, and the *Prevention Research Collaboration* (PRC). They are among the world's leading authorities on evidence-based policy for physical activity, sport and recreation.

The development of the National Sports Plan envisions an Australia where everyone can be a part of sport and can be engaged in healthy living. The aspiration is to maximise the participation of Australians in sport and to identify and reduce barriers to participation. The Turnbull government is to be commended for strong and decisive leadership in recognising the important contribution that physical activity and community sport can make to the health and wellbeing of all Australians as well as to the nation's productivity.

Fully referenced and robust scientific evidence is provided in support of the enclosed submission; in particular, ***an evidence summary is provided as Appendix A***. My team has worked carefully and diligently to provide the most up-to-date and scientifically grounded advice. I hope it will be of assistance to the Government as it finalises the National Sports Plan and I wish you every success in this vitally important endeavour.

For further information about this submission, please contact:

Professor Bill Bellew  
Principal Research Fellow  
E: [william.bellew@sydney.edu.au](mailto:william.bellew@sydney.edu.au)  
T: 02 8627 1852 M: 0420607265

Dr Lindsey Reece  
Senior Research Fellow  
E: [lindsey.reece@sydney.edu.au](mailto:lindsey.reece@sydney.edu.au)  
T: 02 86286222 M: 0491207818

Yours sincerely



PROFESSOR STEPHEN J. SIMPSON AC FAA FRS  
Academic Director, Charles Perkins Centre

## Executive Summary

This submission from the Charles Perkins Centre, The University of Sydney, has been prepared by a team that is highly qualified in the areas under consideration in the consultation. The membership is drawn from the World Health Organization Collaborating Centre for Physical Activity, Nutrition and Obesity (WHOCCPANO), The Sport and Active Recreation Intervention and Epidemiology Research (SPRINTER) Group and the Prevention Research Collaboration (PRC).

### KEY MESSAGES

- **Re-define the meaning and value of sport.** Focus on the powerfully beneficial role that the sport **and** physical activity sector (the sector) can play to make a meaningful, demonstrable difference for individuals, families, community and for society as a whole. Accordingly, the final document might appropriately be titled '*National Sports and Physical Activity Action Plan: More Australians, More Active, More Often*'. Develop an **integrated** consensus statement that re-defines how Sport and Physical Activity (movement) is valued and measured for future generations. The statement would outline that irrespective of age, gender, race, or socio-economic status everyone should be supported and enabled to 'move more' in a way that suits them.
- **Define the priority target audience clearly; allocate resources accordingly.** We recommend a focus on inactive people irrespective of age, race, and socio-economic status. Inactive people are defined as people not achieving 30 minutes of moderate intensity movement each week. Put consumers at the heart of the sport and physical activity service offering to truly understand 'bottom up' how to engage and promote movement in a way that is customised according to people's needs, interests and enjoyment.
- **Ensure fairness in funding allocation.** Address the current inequity in whereby the funding ratio between high-performance and community sports appears dramatically at odds with the goal of promoting/ increasing engagement in physical activity and sport for the *whole community*; the current pattern of 83% to high performance and 17% to community is probably close to the **inverse** of the desirable funding allocation.
- **Establish a shared vision and commitment to action across all government portfolios to achieve clear outcomes, clearly defined accountability and transparent reporting of progress.** To safeguard the multiple social benefits of a more Active Australia, review and, as necessary, amend the relevant Act(s) of Parliament to establish Sport and Physical Activity as a whole-of-government priority and with an emphasis on the least active and most movement-disadvantaged in our society.
- **Establish milestones for agreed organisational and population outcomes within a longer term (10-year) plan and hold agencies within the sport and physical activity sector accountable.** Recognise that cognitive, behavioural, and cultural change is complex, takes time and requires targeted, concerted effort. Incorporate best practices and theory-based techniques of (personal) behaviour change and (institutional) organisational change within and across all elements of the 'system'.
- **Ensure revision and technical improvements in the monitoring and transparent reporting of progress.** Measurement systems should assess the contribution of sport and physical activity on its success in promoting the health and wealth of individuals, families, and communities across the lifecycle, from cradle to grave. Agree a single core metric to measure and communicate progress across the whole sport and physical activity sector. **We recommend "movement minutes" as the core metric** (discussed in detail in the main body of this submission).
- **Establish "physical literacy" and "movement minutes" as core conceptual pillars.** Incorporate these pillars prominently within the Plan. Use "physical literacy" and "movement minutes" as powerful tools for reform across the sport and physical activity sector.
- **Put the Australian Sport and Physical Activity sector back in its rightful leadership position on the world stage.** Establish a national network of centres for sport and physical activity research, evaluation, workforce development, and service improvement. The core purpose would be to accelerate the translation of evidence into policy and practice across the sector. This could operate in a 'hub and spokes' model at national and state levels.

## Responses to the specific consultation questions

### PARTICIPATION

#### **Q1: How should sporting organisations evolve the way their games are played or the products/variations they offer to ensure we get and keep more Australians active?**

- We must consider and define the population (the demand) which we are asking the sporting sector to target. Drawing on learning from the United Kingdom, sporting organisations should have a greater focus on encouraging very inactive people into sport and wider physical activity. (Our suggestion for *targeting* very inactive people is to use an indicator for achieving less than 30-minutes of moderate-to-vigorous physical activity *per week*). It is acknowledged that from an *epidemiological* perspective, the greatest population health risk burden accrues in the ‘low-active’ population segment, that is those (adults) who report achieving in the range 30 – 149 minutes of moderate intensity physical activity per week. However, the *strategic* value of using the “less than 30 minutes” indicator is that it captures the perspective and day-to-day reality of the very inactive in society and helps reorientate service provider organisations accordingly. The recent strategic developments in England (Sport England/Public Health England), together with the evidence-based approach and commitment to evaluation, provides a blueprint for action which is largely transferable to the Australian context; the Heart Foundation’s [Blueprint for An Active Australia](#) is no less instructive.
- Sporting organisations must be clear on the service offering provided to the changing needs of the population “consumers” (the supply). To do this, Sport must be defined in its broadest sense, on a continuum of movement. The essence is sport for social benefit and not sport for its own sake or for the benefit only of the sporting codes and organisations. The world’s leading example of this is Sport England in the Towards an Active Nation strategy; five key outcome pillars, all aiming for one goal to move people from being inactive to active with sport a key player in this shift. It bridges the gap between sport and physical activity, and unites for a shared purpose.
- The chief architects of the strategy in England, Dr Justin Varney, and Ms Kay Thomson, recently provided a series of high-level briefings for governments in Australia as well as an online seminar which summarises the most important learnings. The 7 June 2017 online seminar “**Can the UK provide the blueprint for an active Australia?**” is available at this [INTERACTIVE LINK](#) hosted by PRC in collaboration with The Australian Prevention Partnership Centre (TAPPC).

#### **Q2: How do we make sport and physical activity part of everyone’s daily routine?**

- A fundamental issue to address from the outset is to develop a **shared definition and vision for sport and physical activity**. Throughout this document when the authors use these terms the following definition is used: “*Physical Activity is defined as any bodily movement produced by skeletal muscles that requires energy expenditure*”. This therefore encompasses a whole spectrum of activities including; everyday walking, cycling, work-related movement, active play, recreation (such as gym based activity, dancing, gardening) as well as organised activities, social sport, and competitive sport. We highly recommend that the narrative behind the definition of sport changes to put it on a level playing field as one option for movement and its impact on the broad health, emotional, social, and economic impacts.
- Key words in the consultation question are “**everyone**” and “**daily routine**”. “Everyone” rightly suggests a whole of population approach – a focus on the lifecourse from early years through to advanced old age, including the very sedentary or inactive people as well as the so-called more ‘sporty type’, irrespective of age, race and socio-economic status. “Daily routine” signals the integration of movement into every aspect of daily living; this includes active travel/ commuting, being active at the workplace, at school, active recreation. This requires a broad concept of sport and physical activity so that ‘movement’ is the key action. This is very much in keeping with where Sport England/Public Health England have moved and is also consistent with a focus on prevention through physical activity (addressed in questions 6-9).

- No single approach can, in isolation, deliver sufficiently meaningful increases – therefore a **comprehensive, multifaceted, multisectoral** approach is necessary. This requires system thinking – a method of decision making which looks at the interrelationships of the constituent parts of a system (in this case the Sport and Physical Activity sector) rather than narrowly focusing on the discrete parts themselves. This is critical because when we consider the problem in context; *‘too few Australians are active enough in daily life’*, the solution cannot be found by focusing on one element alone (e.g. National Sporting Organisations only, Physical Education/School Sport only). Looking to other countries such as Finland who once had the highest global rates of heart disease, change can only happen if all sectors are involved. In the case of the Finland, 40 years ago they started a nationwide campaign, shifted money and resources to local authorities, and aimed to increase population physical activity through healthy active outdoor play spaces, enhancing the heritage and conservation trails and worked across all age groups. Finland’s approach now acknowledged as a highly generalizable success story of global significance.<sup>a,b</sup>
- Responses must draw on the socio-ecological theoretical model and requires environmental and policy approaches (including creation and improvement of access to places for physical activity with informational outreach activities, community-scale and street-scale urban design and land use, active transport policy and practices, and community-wide policies and planning) as well as education and informational approaches. We provide an evidence summary as Appendix A which shows “what works” (a) across the lifecourse; and (b) by Setting (e.g. schools, workplaces, sports clubs) and by Strategic approach (e.g. social marketing/mass media, built environment, sport-for-all, active travel). It is clear that many approaches lead to acceptable increases in physical activity among people of various ages, and from different social groups and communities.
- A comprehensive, long term, approach requires multi-sectoral action and commitment, best achieved through high-level coordination out of the Department of Prime Minister and Cabinet (PM&C). For example, a PM&C Implementation Unit could coordinate government departments of Health and Sport, Education and Training, Transport, Communication, Environment and Energy as well as the Australian Sports Commission and Australian Institute of Health and Welfare to deliver the many cross-portfolio aspects of a National Sports Plan. A bi-partisan advisory mechanism, with membership acceptable to government and opposition alike, could increase the likelihood of sustainability beyond the cycles of government; the average length of time between House of Representatives elections has been 2 years and 7 months,<sup>c</sup> and the shortest period for a government was three months and 22 days.<sup>d</sup> [The Australian Prevention Partnership Centre \(TAPPC\)](#) might be a suitable organisation to assist governments in that regard.

### **Q3: How can sports better reach under-represented groups?**

- Firstly, we must define what we mean by “sports”; there is a fundamental need to develop a **shared definition and vision for sport and physical activity**.
- Secondly, we must put the consumer and population at the heart of the service/ programmatic offer, explicitly targeting focused interventions for the “low active, low participation” geographic regions and population sub-groups (female gender, low SES, CALD, Aboriginal and Torres Strait Islander communities).
- Lastly, reaching under-represented groups requires finding the things that communities care enough about to become engaged. We must understand the community identity and values, and encourage individuals from within the communities to lead and facilitate co-production of programs, and services. This has been termed an ‘**ABCD**’ approach – **A**sset **B**ased **C**ommunity **D**evelopment. This approach is based on the principle of identifying and mobilizing individual and community ‘assets’, rather than focusing on problems and needs.<sup>e</sup>

<sup>a</sup> Vuori, Lankeneau, Pratt (2004). [Physical Activity policy and program development: The experience in Finland. Public health reports 119:331-345](#)

<sup>b</sup> [The North Karelia Project: from North Karelia to National Action](#)

<sup>c</sup> [Parliament of Australia: Federal election results](#)

<sup>d</sup> [Parliament of Australia: Facts about the Federal Parliament](#)

<sup>e</sup> [Community Connectors: Asset Based Community Development \(ABCD\)](#)

**Q4: What is the role of non-traditional sport providers in helping to increase participation in sport?**

- We emphasise the urgent need for the sector to **agree and use consistent definitions and language** to communicate across and within the activity sector. The strategic focus can best shift away from organised/ non-organised to **all-encompassing activity** with one single metric to assess change and progress with results. We recommend “**movement minutes**” as a clear and concise metric, which is applicable across agencies and can also be used across any mode of movement (see Text Box).<sup>f</sup>

- Any movement or activity chosen by the consumer plays a critical role in increasing and sustaining participation levels of Australian communities. The responsibility here falls to the sport and physical activity sector to ensure its reach and relevance for the consumers who need it and support them in a way which fosters the activation, and continuation of movement. We recommend avoidance of terms such as ‘traditional’ and ‘non-traditional’ as this language has an historical context which might act as a barrier for targeted groups we are trying to engage.

- The sport and physical activity sector must become more nimble and agile to respond dynamically to the changing needs of the Australian community. Critically, the establishment of a strong national executive function that nurtures leadership and capacity, provides support and advice, guides and acts as a voice for multi-sector organizations across the spectrum of activities from dance, to walking, to netball to golf is, required. The Australian Sports Commission is ideally placed to embrace this function, assuming that the applicable Act of Parliament<sup>g</sup> allows its remit to be broadened to encompass the full breadth of sport and physical activity and that the organisation has the capability, as we believe it does, to embrace the scale of the change required to transform the sport and physical activity sector. Subject to review, an amendment to the Australian Sports Commission Act (1989) may be warranted.

**Movement Minutes**

- Use *Movement Minutes* as the single common metric to measure the success of the National Plan in enhancing the health, wellbeing and wealth of the population through Physical Activity and Sport.
- *The concept of Movement Minutes* offers a consistent and transferrable metric to measure movement across the continuum of physical activity from everyday activities including Active travel and Gardening, to Active Recreation including Dance and Walking through to structured exercise, organised programs, and informal, social and competitive sport.
- The use of *Movement minutes* draws on existing measurement tools [in health and sport-related population surveys] and evaluation frameworks across the Physical Activity and Sport sector yet provides a shared narrative and common metric through which to clearly communicate the value of Sport and Physical Activity.
- *Movement minutes* allow for the assessment of Physical Activity and Sport at an individual, community and population level across the life course and can take into account the mode, frequency and intensity of the chosen activity.
- The use of *Movement minutes* not only creates a common narrative across the Physical Activity and Sport but can also engage multi-sector organisations through a common language they can understand and respond to.
- Movement minutes can be the common currency used within and across the multiple agencies within Physical Activity and Sport sectors, providing a framework for all future funding and commission decisions, and providing a measurement [increases in movement minutes] that reflect programmatic success in all agencies].

**Source:** Reece, L. (2017) *Movement Minutes. Using a common core metric for human movement across Physical Activity, Sport and Recreation.* Prevention Research Collaboration. The University of Sydney.

<sup>f</sup> Reece, L. (2017) *Movement Minutes. Using a common core metric for human movement across Physical Activity, Sport and Recreation.* Prevention Research Collaboration: The University of Sydney,

<sup>g</sup> [Australian Sports Commission Act 1989](#)

**Q5: How do we increase sport participation in the schooling years to maximise physical literacy and establish good habits for life?**

- There is *robust* evidence and good specification for effective programs in both Primary and High Schools. This area represents one of the “best buys” for investment to implement the National Sports Plan. See the **Evidence Summary** at **Appendix A**.
- [Physical literacy](#) may be defined as the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for the lifecourse. It provides the “building blocks” of human movement required to participate in physical activity and sport. Physical literacy must be prioritised, implemented, and institutionalised within the Australian School System, across the sector and across the whole life course. Active play is a fundamental component of physical, social, and emotional development associated with functional movement in adult life.<sup>h</sup> To reverse the tide of inactivity for future Australian’s, physical literacy must be incorporated as a core conceptual underpinning (a pillar) within the new Sport and Physical Activity Action Plan.<sup>i</sup>

---

<sup>h</sup> [Play England \(2008\). Play for change: Play, policy and practice: A review of contemporary perspectives](#)

<sup>i</sup> [Physical Literacy – Web portal – Participaction© \(Canada, 2016\)](#)

**Q6: How do we ensure that the key benefits of sport and physical activity such as physical and mental health, personal wellbeing and community cohesion are promoted by governments and the community?**

- The promotion of these benefits must be tailored (customised) so that the benefits are perceived as relevant and motivating for the intended audiences. This can best be determined through insight research with the various target population sub-groups. There is compelling evidence to indicate that physical activity preferences and personal level motivations/ enablers vary considerably (i) across the life stage, (ii) by gender, (iii) by socio-economic status, and (iv) by cultural and linguistic background; communication strategies to promote and increase physical activity through the lifecourse must reflect this diversity and to tailor strategies per the target audience segmentation.

**Q7: How should we raise awareness of the benefits of sport to the Australian public?**

- There is strong evidence for the effectiveness of social marketing and mass media campaigns that comply with [best practice principles](#), as identified in the *FLOWPROOF* protocol.<sup>j</sup> Campaigns must be consistent, sustained and have sufficient infrastructure to ensure national amplification and local implementation and identity with campaign. Effective campaigns make use of multiple channels, **one of which must be mass media**, combined with the distribution of free or reduced-price PA-related products/services. Providing selected communities with a higher dose of marketing activities and sustaining those activities over time yields more positive outcomes, which is an important consideration for geographical “inactivity hot spots” and for inactive population segments. The products/service provision component of integrated campaigns should be designed to:
  - Facilitate adoption and/or maintenance of health-promoting behaviours (for example increased physical activity through pedometer distribution combined with walking campaigns);
  - Facilitate and/or help to sustain cessation of harmful behaviours (inactivity, prolonged sitting); and
  - Protect against behaviour-related disease or injury (for example recreational safety helmets, sun-protection products).

**Q8: How do we use the reach and influence of sport to get more people active – especially people with sedentary lifestyles?**

- Sports organisations must be encouraged, incentivised and supported to embrace the concept of sport for community benefit rather than sport for its own sake. Nothing less than a paradigm shift is required if sporting organisations are to engage effectively with sedentary Australians. Multi-faceted interventions are likely to have most impact - linking environmental changes alongside engagement with people. Sporting organisations must be held accountable for participation / engagement outcomes; funding should be allocated to providers who demonstrate that they can deliver by engaging the less active individuals and communities so that **more Australians are more active, more often**.
- As noted in response to Q.4, measurement of progress needs to incorporate a single core metric (“movement minutes”), capturing in a clear and transparent way across the whole sport and physical activity sector.
- ‘Behavioural insights’<sup>k</sup> has potential application for re-engineering downstream interventions to be more effective. This may be important for sporting organisations as they re-think their provision of services and programs for less active customers within the community. The [BETA team with the Department of Prime Minister and Cabinet](#) are well placed to coordinate such an undertaking.

<sup>j</sup> Grunseit A, Bellew B, Goldbaum, E, Gale J, Bauman A. (2016) What is best practice for mass media campaigns addressing physical activity, nutrition and healthy weight in Australia? [http://preventioncentre.org.au/wp-content/uploads/2016/08/1607-mass-media-evidence-brief\\_final.pdf](http://preventioncentre.org.au/wp-content/uploads/2016/08/1607-mass-media-evidence-brief_final.pdf)

<sup>k</sup> EAST: Make it EASY, make it ATTRACTIVE, make it SOCIAL, make it TIMELY



**Q9: How do we ensure sport delivery bodies (e.g. Australian Sports Commission, State Departments of Sport and Recreation, National Sporting Organisations etc.) and health promotion organisations work together as effectively as possible to improve population health?**

- Establish a national network of centres for sport and physical activity research, evaluation, workforce development, and service improvement. The core purpose would be to accelerate the translation of evidence into policy and practice across the sector. This could operate in a ‘hub and spokes’ model at national and state levels. For example, in England this approach has already been established: the [National Centre for Sport and Exercise Medicine](#) (NCSEM) is an Olympic legacy project delivering education, research and clinical services in sport, exercise and physical activity from three hubs across England. It is a collaboration of universities, healthcare trusts, local authorities and private and voluntary sector organisations, working together to improve the health of the nation – from everyday people at risk of ill health to elite athletes.
- Co-locate services to create healthy community hubs that unite sport, physical activity people and services in a way that is targeted for local need.
- Focus strategic efforts on people as well as systems.
- Ensure that national policy is cross-sectoral and well-coordinated.
- Foster a thriving and sustainable voluntary and community sector.
- Provide a coherent standardised measurement framework.
- Embed the **principle of co-production** at all levels of the system to ensure ownership is shared across and within the sector.
- Ensure that all involved bodies understand that improving human movement at population scale requires sustained commitment over the long-term.

**MAJOR SPORTING EVENTS**

**Q15: How should governments prioritise investment in major sporting events?**

- Explore whether application of best practice approaches to the bidding process for major international sporting events could be strengthened, especially with a view to *increased transparency*.
- A “Major Sporting Events Taskforce” comprising, for example, the Office of Sport, the ASC and Tourism Australia, could be established, jointly to develop a strategy, bidding framework and review panel for major international sporting events, in collaboration with the States, Territories, and across the sports sector. This group would, in consultation with the relevant State and Local Governments and sports sector, continually evaluate the net social as well as economic benefits to Australia of hosting a major event.
- The Australian Institute of Sport (AIS) could work with sports bodies further to identify event opportunities that would enhance the sports’ high performance outcomes by having ‘home events’ (e.g., World Cups etc.).
- National Sport and public health organisations might collaborate more closely to maximise the community benefit of major sporting investment on community participation levels as well as other aspects of the potential social legacy.
- A prime opportunity when hosting major events, unexploited to date in Australia, is the chance to promote the “Healthy Stadia” concept as has been developed through the European Healthy Stadia Network. This concept should be tested and evaluated for applicability in Australia.
- Another proven concept yet to be exploited in Australia is the “[Football Fans in Training](#)” model; this could be [piloted to confirm its likely application](#) in the Australian context.

**Q17: What should be the roles for national, state/territory and community sporting organizations to grow Australian sport?**

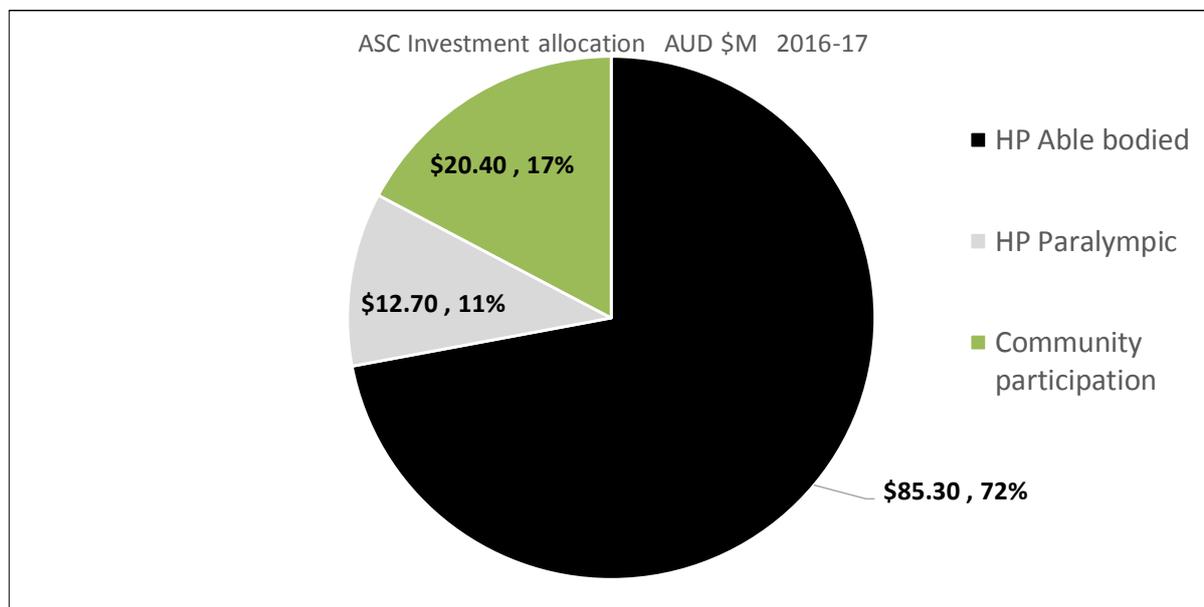
- This question has been addressed implicitly within responses to previous questions. Key points therein describe actions to:
  - drive sustained participation growth among all Australian via sporting organisations;
  - fully integrate sport into relevant government policy;
  - agree a shared vision for sport and physical activity in Australia and create a more cohesive sector;
  - foster stronger, more community-relevant, and more sustainable sports organisations;
  - ensure and foster the development of intersectoral working among the agencies that influence participation in the broadest sense (e.g. transport, planning);
  - further modernise and coordinate the international high performance system;
  - optimise athlete development pathways in the international high performance system;
  - increase the magnitude and impact of sports (community participation) funding;
  - improve data and technology use, to drive both participation and high performance outcomes; and
  - work with state and local governments to ensure the quality and availability of community sports infrastructure.

**Q18: How can sporting organisations (national, state/territory, and community) play a better role in getting more Australians active?**

- There is an urgent need for reform across all levels of government, sports and physical activity agencies if collectively we are to succeed in the aspiration to encourage more Australians to move more at any age (More Australians, More Active, More Often).
- To achieve better returns on the investment of public funds there is a need for ring-fenced budget allocations with accountability for outcomes (specifically focused on the achievement of [Australia's Physical Activity and Sedentary Behaviour Guidelines](#)).
- Tackling inactivity and increasing health enhancing movement requires a long term, cross-sectoral, multi-agency, multi-strategic approach.
- Emphasise a **lifecourse approach** (move more at any age) to initiate and sustain movement for everyone. It is critical to support and maintain the behaviours of people who are already “moving”.

**Q20: Given governments have limited budgets, how should they allocate funding across high performance and community sport?**

- Current funding allocations for high performance versus community sport are dramatically at odds with the goal of increasing community participation, with **83% to high performance and 17% to community**; this is probably the **inverse** of the desirable resource allocation formula. Going forward, it may be that a more balanced portfolio of investment may be achieved through supplementary funding provided by a national good causes lottery.



*Australian Sports Commission: investment breakdown 2016-2017 (83% High performance; 17% Community participation)*

**Q21: Do you support the introduction of a national good causes lottery to increase the funding available for Australian athletes and to increase participation in sport?**

- A national good causes lottery to increase the quantum of funding for participation is to be welcomed. National Lottery funding for sport (as one of several 'worthy causes') is an established practice in many countries. A strong argument used when promoting National Lottery contributions

to sport is the input from non-government dependant revenue streams. Any form of gambling (legal or otherwise) presents potential risks that some degree of social or personal harm may result.

- There are about 80 countries, worldwide, that have some type of National Lottery; and multiple lottery products exist in many countries. Within some countries lotteries are sanctioned by regional/state/provincial/territorial/etc. government [source: [Lotteries by country](#)]. There are also a number of different 'lottery' systems – the common element being the sale of a lottery product (usually a ticket) with the prospect of substantial reward for the winner, based upon chance. Some systems use the term 'lottery' for games that may not rely entirely upon the element of chance (i.e. an element of knowledge or skill can be used in predicting results) – these alternative systems are not considered in this submission.

- The exact number of countries where a National Lottery contributes some revenue to sport (i.e. as one of many 'good causes') is unclear. However, many countries that compete favourably at Summer and/or Winter Olympic/Paralympic Games have a component of sport funding from National Lottery sources; including 24 EU nations, plus Brazil, Canada, China, Japan, New Zealand, South Korea, and Switzerland
- The [SPLISS \(Sports Policy factors Leading to International Sporting Success\) project](#) is an international research consortium that gathers and analyses data on the elite sport policies of 15 countries – Australia, Belgium (separated into Flanders and Wallonia regions), Brazil, Canada, Denmark, Estonia, France, Finland, Japan, Netherlands, Northern Ireland, Portugal, South Korea, Spain, and Switzerland.
- The UK provides the most relevant information on how this might be approached for Australia, with the emphasis on community participation. A useful analysis provided by Social Policy Section of the Australian Department of Parliamentary Services should be re-examined.
- All profits would best be fed back into community sport with advocates from the community involved in this process. Allocation must also be proportional.

**Q22: What other forms of non-government revenue could be used to help Australian athletes and increase participation in sport?**

- Potential revenue streams include, but are not limited to (a) Global Sports Innovation Centres; (b) Social Impact Investment and (c) Partnership/Sponsorship. Robust ethics- and integrity- based approaches to partnerships and sponsorships are required, especially for so-called 'junk food', sugar-sweetened beverages (SSBs), alcohol and gambling, where the values of the Australian community are increasingly at odds with the sports sector.
- Governments need to safeguard public health interests from undue influence by any form of real, perceived or potential conflict of interest when collaborating with the corporate sector/ working through a partnership approach with large multi-nationals.
- Many private sector entities may have no direct conflict in being involved with sport/ physical activity and in fact may have objectives that align closely with those of governments. The building blocks of effective government engagement with the diverse range of private sector entities are:
  - strong regulatory frameworks, both statutory and self-regulatory;
  - a multi-stakeholder platform for implementation, monitoring and evaluation;
  - a robust mechanism to review and ensure effective commitments and contributions;
  - the use of measures, including incentives, to encourage a strong private sector contribution;
  - transparent management of conflict of interest; and
  - sharing of knowledge and data to support collective action at national and state levels.
- The power and influence of civil society should be harnessed to create trust and enable action across sectors. Civil society can play a particularly powerful role in this process as an enabler and constructive challenger, creating the political and social space for collaborations that are based on the core values of trust, service and the collective good. Civil society in all its forms has an important role in holding all stakeholders, including itself, to the highest levels of accountability.
- *Social impact investing* is an emerging, outcomes based approach that brings together governments, service providers, investors and communities to tackle a range of social issues. Draft policy documentation proposes that the Australian Government could primarily support social impact investing by creating an enabling environment for private sector-led social impact investing and by funding (or co-funding with State and Territory Governments) investments which generate savings or avoided future costs to fund reforms and deliver better outcomes for Australians.

## Acknowledgments

The submission was developed following CPC team members:

Professor Adrian Bauman

Professor Bill Bellew

Dr Josephine Chau

Dr Ding (Melody) Ding

Dr Louise Hardy

Dr Lindsey Reece

Dr Justin Richards

Professor Stephen Simpson

Associate Professor Emmanuel Stamatakis.

The preliminary drafts were prepared by Professor Bill Bellew and Dr Lindsey Reece; these were reviewed by all members of the submission team to develop the final document.

### Suggested citation

Reece, L., Bellew, B., Bauman, A., Chau, J., Ding, D., Hardy, L., Richards, J., Simpson, S., Stamatakis E. (2017) Consultation on the development of a National Sports Plan for Australia. Submission from the Charles Perkins Centre, The University of Sydney. July 2017.

## CONTENTS

<b>Covering Letter from Professor Steve Simpson</b> .....	1
<b>Executive Summary</b> .....	2
KEY MESSAGES.....	2
PARTICIPATION .....	3
PREVENTION THROUGH PHYSICAL ACTIVITY .....	7
MAJOR SPORTING EVENTS .....	8
GOVERNANCE .....	9
SOURCES OF FUNDING, INCLUDING NATIONAL GOOD CAUSES LOTTERY .....	10
<b>Acknowledgments</b> .....	12
<b>Detailed Responses to Specific Consultation Questions</b> .....	14
<b>Appendix A Best Practice Evidence Summary</b> .....	35
<b>Appendix B Background Information on the Consultation Process</b> .....	46

## Detailed Responses to Specific Consultation Questions

### 1. How should sporting organisations evolve the way their games are played or the products/variations they offer to ensure we get and keep more Australians active?

#### In Short

The offer from sporting organisations should have a greater focus on encouraging inactive people into sport and wider physical activity. The recent strategic developments in England (Sport England/Public Health England), together with the evidence-based approach and commitment to evaluation, provides a blueprint for action which is largely transferable to the Australian context. The essence is sport for social benefit and not sport for its own sake or for the benefit only of the sporting codes and organisations. Through the Prevention Research Collaboration, the chief architects of the strategy in England, Dr Justin Varney, and Ms Kay Thomson, recently provided a series of high-level briefings for governments in Australia as well as an online seminar which summarises the most important learnings. The 7 June 2017 online seminar “**Can the UK provide the blueprint for an active Australia?**” is available at this [INTERACTIVE LINK](#) hosted by The Australian Prevention Partnership Centre.

#### The Details

We must be clear on how we are defining sport and what the priority is. Clearer definitions around sport, active recreation, and physical activity must be a high priority outcome of this consultation because this will encourage a shared narrative over priorities and crucially how we define success. As a sector, we must be explicit about our focus, our target audience, and our priorities. That way we can then influence strategy and implementation. Drawing on the pivotal learning from the Marmot review (2010) 'commissioned in the UK<sup>m</sup>, equity must be a priority and through this we approach we can consider proportional investment. In relation to encouraging population shifts in physical activity, this can support a tiered approach to a physical activity strategy.

These include:

- Population programmes – programs that target everyone. This can involve policy, environment, and social marketing; and
- Targeted programmes which have a clear defined audience.

For example, in the UK it is focusing on inactive people performing less than 30mins moderate intensity physical activity *per week* which, when filtered down on a regional level, results in targeted programmes in areas where 25% least active of the population live. Shifting the response to focus on Sport, the following question is posed; *Does the Australian government and sport, physical activity sectors understand the role of sport in promoting health enhancing behaviours for Australian people?*

Sport England commissioned a review of the role of sport in 2002 which confirmed within the UK context, that there was a distinct lack of evidence of the role of Sport in tackling inactivity and thus informed the 'towards an active nation' strategy and innovation funding stream 'get healthy get active'. Arguably the cultural relationship Australians have with sport is quite different and perhaps a review like the Cavil et (2002)<sup>n</sup> could be conducted here. The CSIRO report in 2013 explored the shift in trends in the sport sector making explicit recommendations on how the sector should evolve to respond changing user need. In addition, the ASC intergeneration review of sport in 2017 explores the investment in sport, its social and economic value along with ways in which the sector can operate more efficiently. There remains a gap, however, which explores best practice strategies that focus on shifting the population from awareness raising and knowledge through to translation of actual behaviour – shifting Australians from knowing it's a good idea to changing their behaviours and critically what role, the sport

---

<sup>l</sup> Marmot (2010). Fair Society, Healthy Lives: strategic review of health inequalities in England post 2010

<sup>m</sup> Throughout this response, learning from the UK is heavily used mainly in relation to the significant political, cultural and systematic changes throughout government and the sport sector, but also due to the skills and experience of the lead author.

<sup>n</sup> Haapala HL, Hirvensalo MH, Kulmala J, et al. Changes in physical activity and sedentary time in the Finnish Schools on the Move program: a quasi-experimental study. *Scand J Med Sci Sports* 2016;26. Epub ahead of print. doi:10.1111/sms.12790

sector can play in this. With this in mind, a review could be conducted along with a best practice scoping to identify pockets of best practice to begin building and driving the evidence base.

Finally, we shift attention to the modification of sports to cater to a broader audience and see there have been some global examples which have shown effectiveness. In adults, the obvious ones include the EuroFit programme which takes a unique approach for improving men's health and fitness by allowing fans to train in the environment of a professional football club they support. City Ride events are another example, where families and friends of all ages and abilities can enjoy cycling together through the streets of a vibrant traffic-free environment. Similarly, walking sports offer a social atmosphere of fun, laughter and camaraderie for those who may have difficulty participating in high impact activities. The Barclays bank sponsored programme in the UK for walking football and the partnership with Macmillan cancer care are excellent examples also. There is also evidence that for children, adapting sports away from the traditional game encourages a raised heart rate for longer duration within matches, allows for more frequent touches on the game, enhanced engagement in the game, increase time spent with coaches that fosters relationship and skill development along with increased fitness outcomes. The American soccer model is an excellent example of this. Another great example is Finnish Schools on the Move, a very promising national action programme to establish a physically active operating culture in schools in Finland. °

Crucially, it is important people have positive social exercise experiences which enrich participant's quality of life and in doing so make the pursuit of exercise a more satisfying and worthwhile activity. This can be achieved by creating exercise environments that provide individuals with a shared sense of social connectedness, creating opportunities for people to form friendships, meaningful attachments, and mutually supportive relationships.

## **2. How do we make sport and physical activity part of everyone's daily routine?**

### **In Short**

The key words in the question are “*everyone*” and “*daily routine*”. “Everyone” denotes a whole of population approach – one which spans the lifecourse from early years through to advanced old age, including the very sedentary or inactive people as well as the more sporty type. “Daily routine” denotes integration into every aspect of daily living, for example active travel/ commuting, active at the workplace, active at school, active recreation. This requires a broad concept of sport and physical activity so that ‘movement’ is the key concept. This is very much in keeping with where Sport England/Public Health England have moved and is also consistent with a focus on prevention through physical activity (addressed in questions 6-9).

We provide an evidence summary as Appendix A which shows “what works” (a) across the lifecourse; and (b) by setting (e.g. schools, workplaces, sports clubs) and strategy (e.g. social marketing, built environment, active travel). It is clear that many approaches lead to acceptable increases in physical activity among people of various ages, and from different social groups and communities. However, no single approach can, in isolation, deliver sufficiently meaningful increases so that a comprehensive, multifaceted approach is necessary. This requires environmental and policy approaches (including creation and improvement of access to places for physical activity with informational outreach activities, community-scale and street-scale urban design and land use, active transport policy and practices, and community-wide policies and planning) as well as education and informational approaches.

This comprehensive approach requires multi-sectoral action, preferably with coordination out of the Department of Prime Minister and Cabinet (PM&C). For example, a PM&C Implementation Unit could coordinate government departments of Health and Sport, Education and Training, Transport, Communication, Environment and Energy as well as the Australian Sports Commission and Australian Institute of Health and Welfare to deliver the many cross-portfolio aspects of a National Sports Plan.



## The Details

To answer this question we must understand how people behave in the environment in which they are. We have as a population engineered movement out of our lives and now we must focus on re-designing how to integrate physical activity back into our everyday lives so that it becomes the easy and normal option.

The UK is an example of a country which explicitly made a commitment to increase the population physical activity levels in light of its award to host the London 2012 Olympic and Paralympic games. Strategically and politically, there has been a stark shift in focus over the last 10 years to tackle inactivity, defined as all individuals achieving less than 30 minutes of moderate intensity physical activity a week and critically, have aligned clear parameters and accountability within sport strategies to measure progress against these outcomes; Sporting Futures (UK government), Towards An Active Nation (Sport England) and Everybody Active Everyday (Public Health England). There are several common themes which run throughout these documents;

- 1) Defined target audience
- 2) Define Physical Activity as any form of movement which raises the heart rate and so helps to improve physical and mental wellbeing. Views all activity on a continuum from Everyday activity (*active travel, heavy housework, DIY*), to Active Recreation (*Recreational walking, cycling, active play, dance*) through to Sport (*Swimming, exercise training, individuals pursuits, informal sport*).
- 3) Clear outcomes to measure success and accountability
- 4) Clear, consistent standardized evaluation frameworks
- 5) Lifecourse approach
- 6) Place behavioural change at the heart.

Looking to the evidence base and key messages on what works, the literature base has grown exponentially, and whilst interventions vary in terms of quality and design, with a fairly limited picture of 'what works' at population level there are some common themes that include whole of school programmes, urban design regulations, transport policies and systems that promote walking, community wide programmes, sport systems and programmes that focus on sport for all and encourage participation across the lifespan to name a few.<sup>P</sup>

A further WHO publication on 'what works' for physical activity (2009) suggested that multi-component interventions that are adapted to the local context, that use the existing social structures of a community and involve participants in the planning and implementation stages of the intervention represent the most effective option. Therefore, using whole systems approaches (an approach that considers all age groups and socio-demographics within a defined boundary) that combine multi-level interventions concurrently and importantly consider an individual's values as well as their apparent need for physical activity should be the focus for any attempt to elicit a significant shift in participation. Increasing population physical activity and tackling inactive is complex we must look across all the different factors and explore what can be done over the short, medium, and long term within a sustained whole systems approach. An example of such an undertaking is the UK approach to tackling Obesity which developed the pivotal Foresight map which revolutionized the approach taken to address the epidemic.

The National Centre for Sport and Exercise Medicine (NCSEM) represents part of that commitment and holds a remit for promoting health and wellbeing at a population level through enhancing the UK's offer of Sport and Exercise Medicine. As such it has global reach and impact. Sheffield is one of three founding partners (along with East Midlands and London) of the NCSEM and with expertise in physical activity and health, Sheffield stakeholders recognized the need to address the chronic burden of disease caused by a sedentary culture and identified the NCSEM as an excellent vehicle through which to do so.

---

<sup>P</sup> Baker et al, 2011. Community wide interventions for increasing physical activity. Cochrane. 13; (4)

<sup>q</sup> <https://www.gov.uk/government/publications/reducing-obesity-obesity-system-map>

A direct output of this was the creation of 'Move More', a framework for increasing physical activity through creating a culture of physical activity<sup>r</sup>. The reason for its inclusion here is the socio-ecological approach taken, like the Public Health England; Everybody Active Every day<sup>s</sup> that it explicitly states four domains for action; 1) Active Society 2) Moving Professionals 3) Active Environments 4) Moving at scale. Critically, it demonstrates how impact will be measured through standardized evaluation frameworks and continued investment in robust population level surveys including sport, physical activity, and active travel. The Sport England Strategy 2016-2021 [Towards an active nation](#), drills down further in its strategy and encompasses all activity around 5 key outcomes including individual health and wellbeing, community, social and economic development (Figure 1)

## SPORT ENGLAND STRATEGY 2016-2021

AN OVERVIEW OF  
OUR STRATEGY

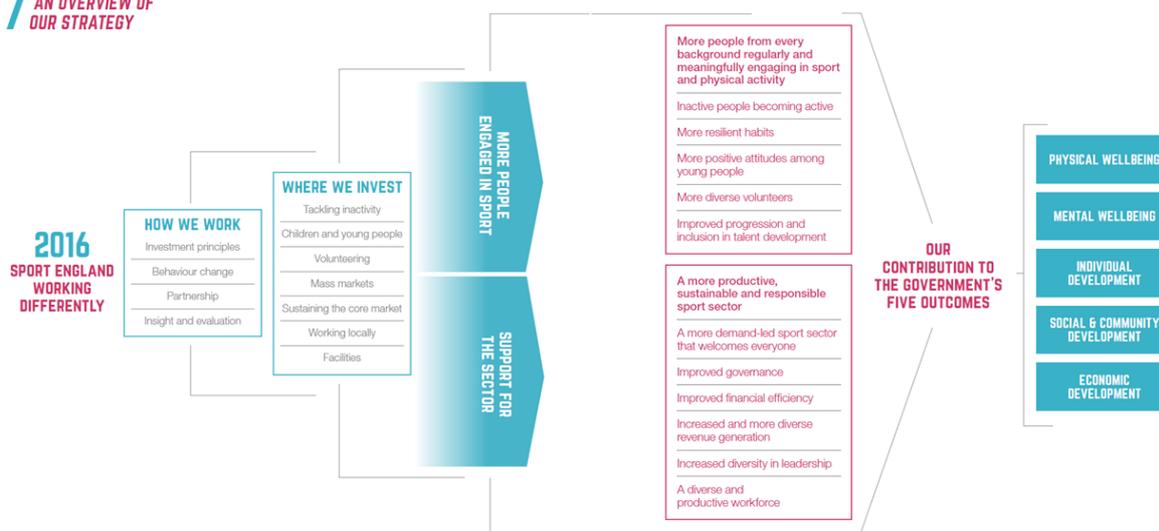


Figure 1 Overview of the Sport England Strategy Towards an Active Nation 2016-2021

One year after inception, a review of how funded programs have contributed to this evidence base has been produced. As this adopts an all-encompassing activity approach, the role of sport as a primary vehicle in producing health enhancing behaviour is diluted, however the approach to accountability and progress provides valuable lessons for the Australian context:

1. **Transport:** Re-focus transport strategy over time, to provide long-term continuity of resources to incentivise and facilitate walking and cycling as regular daily transport.
2. **Our world:** Existing and planned new developments and infrastructure to be 'health-checked' to ensure that walking, cycling, active recreation and other forms of physical activity are prioritised.
3. **Our work:** Active workplaces: Employers are encouraged to support their employees, suppliers and visitors to be active while at work, or travelling to or from work.

<sup>r</sup> NCSEM, Sheffield.2015. The Move More Plan: A framework for increasing physical activity in Sheffield 2015-2020 <https://movemoresheffield.com/Media/Default/Documents/move-more-plan.pdf>

<sup>s</sup> Public Health England. 2014. Everybody Active, Everyday; an evidence based approach to physical activity

### 3. How can sports better reach under-represented groups?

#### In Short

To engage with under-represented groups we must identify the factors that communities are concerned about and are valued sufficiently for them to take action. We must understand the community identity and values, encourage individuals from within the communities to lead and co-produce interventions. Looking to the literature, this is defined as adopting an ABCD approach – Asset Based Community Development. This approach is based on the principle of identifying and mobilising individual and community ‘assets’, rather than focusing on problems and needs.

#### The Details

We highlight the breadth of the sector and our response will therefore encompass all forms of physical activity including Sport. Marmot (2010) helps us to see that focusing solely on the most disadvantaged will not reduce health inequalities sufficiently. To reduce the steepness of the social gradient in health, actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage. We call this “*proportionate universalism*”.<sup>t</sup>

briefly, to engage with under-represented groups we much find the things that communities care enough about act upon. We much understand the community identity and values, encourage individuals from within the communities to lead and co-produce interventions. Looking to the literature, this is defined as adopting an ABCD approach – Asset based community development. This approach is based on the principle of identifying and mobilizing individual and community ‘assets’, rather than focusing on problems and needs.

As outlined by Foot and Hopkins, (2010)<sup>u</sup> ABCD is a set of values and principles which:

- Identifies and makes visible the health-enhancing assets in a community;
- Sees citizens and communities as the co-producers of health and well-being, rather than the recipients of services;
- Promotes community networks, relationships and friendships that can provide caring, mutual help and empowerment;
- Identifies what has the potential to improve health and well-being;
- Supports individuals’ health and well-being through self- esteem, coping strategies, resilience skills, relationships, friendships, knowledge, and personal resources; and
- Empower communities to control their futures and create tangible resources such as services, funds, and buildings.

There is increasing policy interest in adopting this approach as it can influence health inequalities through targeting appropriate communities, valuing resilience, and strengthening community networks as well as fostering trust between service providers and communities. It is widely recognized that sports recognition creates a myriad of social dividends, not only providing obvious physical health benefits but more broadly in relation to community cohesion, social interaction. Strengthening communities through sport and uniting public, private and community sectors can amplify these impacts as well as enhance sustainability through local ownership. Practical examples of how sport can achieve is through strengthening the capability and capacity of the volunteer and ambassador networks within underrepresented groups, and establishing role models and case studies from targeted groups. Sport England has undertaken a core amount of work in this area and has developed insights packs which are widely available. They also offer the following guidance for targeted implementation:

---

<sup>t</sup> <http://www.sciencedirect.com/science/article/pii/S0277953616300260>

<sup>u</sup> <http://www.altogetherbetter.org.uk/Data/Sites/1/5-assetbasedcommunitydevelopment.pdf>

- Put needs at the heart of the target audience
- Co-design interventions and recruit target populations on your team to ensure embedded throughout.
- Re-frame the message to ensure it meets the values, motivations, and barriers to the needs of the target audience.

#### 4. What is the role of non-traditional sport providers in helping to increase participation in sport?

##### In Short

The sport, recreation, and physical activity sector traditional and non-traditional alike, must adapt, must be agile to respond to the changing needs of the Australian community. The development of an executive agency that supports, advises, guides and acts as a voice for multi-sector organizations across the spectrum of activities from dance, to walking, to netball to golf is indicated. This could serve as a powerful advisory mechanism to government, also providing a voice for the sector to ensure policymakers, academics, the media work together to make the development of an active nation a high priority.

##### The Details

Not everyone wants to play 'Aussie rules' or Rugby or netball. People value movement in different forms – all the way from cultural dance, through to heavy housework and on to outdoor activities and fitness. The behaviour of Australians varies over time with individuals engaging in activity for different reasons. Whilst sport remains important for some, trends indicate non-sport related activity becomes more important as individuals age and motivations for change with physical health and fitness report by adults as the key reasons to engage. Understanding the motives and barriers are pivotal in shifting population from intention into action and implementation. Examples where this marketing has worked well include the Sport England This Girl Can campaign.

According to Ausplay data, the most popular activity amongst adult men and women are walking for recreational purposes and fitness/gym. This reinforces the central role non-traditional sports have in shifting inactive populations into doing more. This is not new in Australia, a report by CSIRO (2010)<sup>v</sup> outlined the rise of individual sport and fitness activity due to increasing time pressures and a more health conscious society. In the UK a report on the rise of the activity sector by UK active<sup>w</sup> also credits societal trends bringing active lifestyles more prominently into focus as well as the role of social media in fostering a passionate connection with fitness and wider health. Essentially, this results in a sport and physical activity sector that must adapt and respond to the changing needs of the audience.

Pragmatically, this might mean greater flexibility in payment options for fitness suites, access must move from traditional hours to accommodate busy lifestyles where individual's need to be supported on a much broader basis than hitherto. Consideration of workforce readiness, for example with more individuals living with chronic disease, implies that must be investment in training and quality standards to ensure a professional and safe environment for this population group to become active, in comfort and in safety. This indicates the need for a coaching and training infrastructure with transparent standards and accountability, and designed to upskill and build capability and capacity across the sector.

The development of an executive agency that supports, advises, guides and acts as a voice for multi-sector organizations across the spectrum of activities from dance, to walking, to netball to golf is indicated. This could serve as a powerful advisory mechanism to government, also providing a voice

---

<sup>v</sup> [https://www.clearinghouseforsport.gov.au/\\_data/assets/pdf\\_file/0006/564072/The\\_Future\\_of\\_Australian\\_Sport\\_-\\_Summary\\_Report.pdf](https://www.clearinghouseforsport.gov.au/_data/assets/pdf_file/0006/564072/The_Future_of_Australian_Sport_-_Summary_Report.pdf)

<sup>w</sup> <http://www.sportsthinktank.com/uploads/ukactive---the-rise-of-the-activity-sector.pdf>

for the sector to ensure policymakers, academics, the media work together to make the development of an active nation a high priority. Membership of such a community could usefully be broadened to include outdoor recreation, dance, arts and cultural sector along with commercial companies such as gyms; they all play a role in engaging individuals and communities into physical activity participation at any age. An example of success from the UK is the organisation UK active. UK active facilitates high impact partnerships, champions innovation, provides high quality services to members, undertakes campaigning activity, undertakes research and provides research-based insights. This could be an example of a catalyst organisation to be developed and nurtured in Australia.

## **5. How do we increase sport participation in the schooling years to maximise physical literacy and establish good habits for life?**

### **In Short**

There is robust evidence and good specification for effective programs in Primary and High Schools. This area represents one of the “best buys” for investment to implement the National Sports Plan. See Appendix A.

### **The Details**

There is strong evidence that ‘enhanced’ school-based physical education (PE) in primary and secondary schools can be very effective (see Appendix A). Interventions include:

- Teaching strategies (e.g., modifying games, substituting less active games with more active games)
- PE lesson plans that incorporate fitness and circuit training activities
- Well-designed PE curricula taught by trained teachers.
- Programs that combine enhanced school-based PE with other school- and community-based interventions such as student health education about physical activity, activities that foster family involvement, and community partnerships to increase opportunities for physical activity.

The 2017 Intergenerational Review identified this area as a “game changer” advocating for the following[1]:

- Raise awareness of the importance of child fitness, movement, and sport skills development (i.e., physical literacy) to parent and other groups;
- Ensure the mandatory sport and PE components of the curriculum are taught in all schools, especially given time spent doing sport and PE is as important as the outcomes derived from it;
- Monitor the frequency and quality of PE and generic sport skill teaching in schools through Sample Assessments to report on students’ physical literacy development;
- Expand Sporting Schools style programs in primary schools and to secondary schools, increase the teacher support component, and integrate with NSOs and club structures and integrated with pre and after-school care programs;
- Improve teacher capability by including sport in teacher training, providing a central repository of easy-to-use, low-cost resources that focus on generic skill development and are mapped to the curriculum, and helping to create a safe environment for kids to play;
- Ensure teachers are incentivised to take time outside the classroom to teach sport; and
- Ensure school sport facilities are integrated with the broader communities, e.g., by increasing community access to school infrastructure and planning co-located new school and community facilities.

Giving children the best start in life and enabling children and adult to take control over their lives, is the cornerstone of the Marmot review (2010) when tackling health and social inequalities. The importance here is the role physical activity can play in promoting a healthy and happy lifestyle across the lifecourse. The benefits of physical activity are wide ranging, and exceed beyond physical health and wellbeing. Physical activity can improve the educational attainment of children, help reduce anti-social behaviour,

build self-esteem across the life-span, contribute to urban regeneration and help increase work productivity, quality of life and contribute to economic growth<sup>x</sup>. The level of physical activity of the new and emerging generations is particularly low, resulting in disorders, once the reserve of adulthood, now common amongst our children and young people (i.e. type II diabetes). Inactive children become inactive adults perpetuating the cycle. This is unacceptable. A change in culture is urgently needed.

There is no doubt that schools are an essential setting to promote healthy movement patterns amongst children and young people. A clear outcome should be that all children are provided with a positive experience of physical activity through the physical, social, and educational environment of the school. We must prioritise physical activity and movement within the school curriculum, as well as developing a school environment which rewards and encourages physical activity. Featured in Move More Sheffield (National Centre for Sports Medicine, Sheffield ; Olympic legacy funded programme in the UK<sup>y</sup>), a recent publication from the American College of Sports Medicine, the International Council for Sport Science and Physical Education and Nike, Inc. (see [www.designedtomove.org](http://www.designedtomove.org)<sup>z</sup>) outlined 7 core components of programmes that are known to inspire and enable children to participate in physical activity both in and out of school and that contribute to a child's positive development.

The 7 core principles as outlined in Designed to Move are:

1. **Universal Access:** Programmes that are effective for every child, including those who face the most barriers to participating in physical activity (e.g., girls, children with disabilities, minorities, obese children, those from low-income families) are likely to improve both the quality and experience for broader populations.

2. **Age Appropriate:** Physical activities and tasks that are systematically designed for a child's physical, social and emotional development, as well as his or her physical and emotional safety, are a non-negotiable component of good programme design.

3. **Dosage & Duration:** Maximum benefit for school-aged children and adolescents comes from group-based activity for at least 60minutes per day that allows for increased mastery and skill level over time. A variety of physical activities, structured play sessions and sports should also be included.

4. **Fun:** Create early positive experiences that keep kids coming back for more, and let them have a say in what "fun" is.

5. **Incentives & Motivation:** Focus on the "personal best" versus winning or losing. Celebrate attendance, participation, and both individual and group effort and progress.

6. **Feedback to Kids:** Successful programmes build group and individual goal-setting and feedback loops into programmes to let kids know they're on the right track.

7. **Teaching, Coaching & Mentorship:** Teachers of physical education, coaches and mentors can make or break the experience for kids. They should be prepared through proper training and included in stakeholder conversations; and their work should be celebrated and honoured.

It is critical that there is a clear strategy to engage the school and activity sector in enabling all children to move more in a healthy way throughout their lives. To achieve this, the following are required:

a) **Active schools:** A whole school approach is needed across the breadth of the school day.

---

<sup>x</sup> Bailey, Hillman, Arent and Petitpas. (2013). Physical activity: an underestimated investment in human capital. *Journal of Physical Activity and Health*.

<sup>y</sup> NCSEM, Sheffield.2015. The Move More Plan: A framework for increasing physical activity in Sheffield 2015-2020

<sup>z</sup><http://e13c7a4144957cea50132f5ab26d5e83af3ea377013dd602911.r77.cf5.rackcdn.com/resources/pdf/en/full-report.pdf>

- b) **Quality Standards:** development of quality standards to assess the quality of physical activity provision in schools and allow for formal evaluation.
- c) **Involvement of Providers:** Actively seek the roles sport and activity providers can play in delivering high quality, accessible educational, health and social interventions, as well as positive sports experiences for all.
- d) **Fitness Monitoring:** develop robust, consistent monitoring measures for physical fitness – a more important measure of long-term health and wellbeing. Importantly, as well as any assessment being reliable and valid it must also be simple to administer and represent a positive experience for our children and young people. The availability of reliable and valid data on physical activity, physical fitness and the physical literacy of children and young people will be crucial to the targeting of interventions and the shaping and evaluation of physical activity provision.

To support the implementation of the above, a body is required to lead and drive this agenda. One approach could be the development of a national centre for sport and physical activity that is tasked to review the current provision of physical activity, recreation, and sport offer for children and then through the leverage of this 'hub' unite, to share learning and enhance the school offer moving forwards. The ASC, with its sporting schools programme could have a pivotal role in driving this agenda. The vision for such an agency is to ensure all children are given the opportunity and environment to develop functional movement that will enable them to move throughout life into old age.

Critically the 'hub' should be made up of a holistic team with a broad reach of providers, commissioners, researchers, policy makers, sport and physical activity specialists, teachers, and school representatives to ensure best practice (e.g. what works locally, best research evidence,) for physical activity and sport.

The agency could also look at the following:

1. Skills and confidence audit of teachers delivering school PE with follow-up coproduced training programme.
2. Investment in physical education and the physical education workforce to address functional movement patterns and skill acquisition at an early age.
3. Engagement with the higher education sector to ensure the strategic deployment of student coaches and volunteers in the delivery of programmes for children and young people.
4. The links between schools (primary and secondary), community sports clubs and NSO's.
5. Foster the school as a key asset within a community. Consider the utilization of school facilities for community provision to ensure the whole family to move outside of school.
6. Engage with community and volunteer sectors to host events or awareness raising events, for example a sports day or Parkrun.

An example of a whole school approach which is considered a success and currently under evaluation is the daily mile which is voluntarily run by schools in the UK. Nationally this now involves more than 3000 schools. It is deemed a success for the following reasons:

- It takes place over just 15 minutes, with children averaging a mile each day.
- Children run outside in the fresh air – and the weather is a benefit, not a barrier.
- There's no set up, tidy up, or equipment required.
- Children run in their uniforms so no kit or changing time is needed.
- It's social, non-competitive and fun.
- It's fully inclusive; every child, whatever their circumstances, age or ability, succeeds at The Daily Mile.

Prevention through physical activity – Questions 6 - 9

## **6. How do we ensure that the key benefits of sport and physical activity such as physical and mental health, personal wellbeing and community cohesion are promoted by governments and the community?**

### **In Short**

The promotion of these benefits must be tailored per audiences for whom the benefits will be relevant and motivating. This can best be determined through insight research with the various target segments. There is evidence to indicate that physical activity preferences and personal level motivations/ enablers

vary considerably (i) across the life stage, (ii) by gender, (ii) by socio-economic status, and (iv) by cultural and linguistic diversity; communication strategies to promote and increase physical activity through the lifecourse must reflect this diversity and to tailor strategies per the target audience segmentation.

To surmise, the sector a ring fenced budget for preventive health which has cross sectorial leadership at ministerial level, with clear defined outcomes with which progress can be measured.

## The Details

The benefits of physical activity have been widely recognized and undisputed for decades. Messaging conveying the benefits of physical activity have been promoted for years and therefore awareness amongst communities probably isn't the issue – it is to do with opportunity and environment. Adopting a socio-ecological approach and considering the physical, social, and economic environment context, we then must think where does Sport fit. Education and awareness is based upon faith and belief yet the effectiveness of creating a population shift in the population levels of activity are somewhat limited. We therefore must consider at a population level, what can government and the sport/physical activity sectors do to promote a behavioural shift at the population level. An example could be targeting all journeys under a mile and asking people to swap from the car to active travel – then considering how sport/physical activity can facilitate this. Perhaps offer free use of washroom facilities if they active travel to spectate matches.

There must be transparent, strong support at a political and a strategic level appreciating the potential of all forms of movement, physical activity, leisure, active recreation, and sport – all-encompassing activities and the role they play in leading a healthy lifestyle. Language and definitions are key. An appreciation of the potential of walking, active transport, and dancing to the wider positive levels must be reflected at the highest levels. This, along with an agreement of shared outcomes, will allow a clear direction of travel for the sector. Secondly, clarity of terms. What we mean as a sector when we say physical activity and what this means for people. Marketing needs to be in terms and language that resonates with people and the target audience.

Agree clear, consistent measurement tools and standardized approach to measure these outcomes that allow academics to collate and build a strong evidence base. A strong evidence base which collects important, useful, and relevant data will support all multi-sector agencies to demonstrate the outcomes they must persuade of the benefits of physical activity, active recreation, and sport. Importantly this will have allowed the identification of best practice, for the characteristics of successful interventions to be shared along with those interventions that don't work and critically identify gaps in the current evidence base.

The role of academics in this space. Their role is to keep the sector relevant and useful and crucially fit for the future. This can be achieved through evidence informed practice, supporting applied PhD programs, directly commission research to answer questions but critically invest in the education and learning of the sector. Clear transparent pathways from volunteer roles through to coaching awards and qualification, this helps to share best practice and create a sustainable and viable sector which thrives on the passions sport and movement ignites in individuals.

With all that in mind, and an explicit acknowledgment of the role of Sport amongst a broader continuum of recreation and physical activity, along with the associated bodies agencies responsible for promoting such activities. All funding should then be given to the sector who can best demonstrate their ability to deliver tangible outputs against the associated outcomes and beneficial impact on individuals and communities.

Sport however cannot champion this alone, there must be accountability and buy in from cross-government agencies that physical activity is a vehicle to support them to achieve their outcomes as well as the outcomes agreed by the sport/physical activity sector. There must be an understanding of the perspective with which each of the key governmental departments are coming from and then share the evidence of how physical activity can help with this. For example, presenting the economic return



of investment case for housing and employment or reduction in social care use through investing in physical activity departments. Benefits must be delivered in a way in which the recipient values. Maximize resource not just cash. Use behaviour change to influence funding decisions. Allocate resource to targeted group where likely to see biggest returns on investment.

## 7. How should we raise awareness of the benefits of sport to the Australian public?

### In Short

There is now strong evidence for the effectiveness of social marketing and mass media campaigns in this regard. Effective efforts make use of multiple channels, one of which *must* be mass media, combined with the concurrent distribution of free or reduced-price PA-related products/services are effective. Providing selected communities with a higher dose of marketing activities and sustaining those activities over time yields more positive outcomes.

The products/services should be designed to:

- Facilitate adoption and/or maintenance of health-promoting behaviours (i.e., increased physical activity through pedometer distribution combined with walking campaigns);
- Facilitate and/or help to sustain cessation of harmful behaviours (inactivity, prolonged sitting); and
- Protect against behaviour-related disease or injury (recreational safety helmets, sun-protection products).

Use of behavioural insights (EAST: Make it EASY, make it ATTRACTIVE, make it SOCIAL, make it TIMELY) <sup>aa</sup>can have a role to play in re-engineering downstream interventions to be more effective. This may be very important for sporting organisations as they re-think their offer to the less active within the community.

### The Details

People's behaviour strongly influences their health. However, even when people know what the 'healthy' thing to do is, and intend to do it, they often encounter significant barriers. Awareness and intention are rarely enough; we must find other ways of helping people change their behaviour. The challenge for practitioners and the sport and physical activity sector, is to identify the most effective ways of supporting people to make these changes, and ensuring that they become sustainable. Behaviour change must be at the heart of strategy. The UK behavioural insights team <sup>bb</sup>worked with a multidisciplinary team to develop the EAST framework which was a way of applying behavioural science to a real world problem. The core message behind EAST is; Make it EASY, make it ATTRACTIVE, make it SOCIAL, Make it TIMELY.

- A national plan of action
- Broaden the reach beyond sport – take it the mass market!
- Support people to be active in a way that they choose.
- Deliver public campaigns supported with community infrastructure to help people of all ages understand the benefits of physical activity and the wide range of opportunities to get involved.
- Train and educate the workforce of the sector so that at every opportunity the importance is reinforced.

---

<sup>aa</sup> Service et al, 2002: EAST: four simple ways to apply behavioral insights. Nest/UK cabinet office

<sup>bb</sup> UK Behavioral insights team in partnership with Cabinet office and Nesta. 2010. EAST: four simple ways to apply behavioral insights

## 8. How do we use the reach and influence of sport to get more people active – especially people with sedentary lifestyles?

### In Short

Sport must embrace the concept of sport for community benefit rather than sport for its own sake. Nothing less than a revolutionary change in basic assumptions is required if sporting organisations are to engage effectively with sedentary Australians. Multi-faceted interventions are likely to have most impact - linking environmental changes alongside engagement with people. This is likely to take several years rather than several months to show real results. There is an assumption that sporting organisations will be supported through these changes and be incentivised accordingly. Conversely, organisations must be held accountable for participation / engagement outcomes and funding should be allocated to providers who can deliver.

### The Details

Firstly, there is an urgency to clarify the target groups in mind and the characteristics of these groups. For example, addressing the 'pre frail' as significant savings to health and social care budget here. Families through adopting a whole system approach and the continued need to focus on inequalities – Low SES, deprived communities, those with mental illness, chronic disease, and underlying conditions.

There is no “magic bullet” for reducing inactivity and Australia should look to advancements in other countries, such as UK Sporting Future and Sport England’s tackling inactivity strategies, to adopt a long term approach committed to reversing current trends and enabling physical activity and sport for all. To be successful, especially with harder-to-reach groups, interventions must focus on the needs of the audience. Multi-faceted interventions are likely to have the most impact - linking environmental changes alongside engagement with people. Safety, for example is a significant barrier to encouraging cycling. Training people to ride a bike to build their confidence is important but doing this in combination with the introduction of 20mph speed limits and building a network of separated cycle lanes, is likely to be far more effective.

A long term 10-year commitment is required that focuses on changing the environment rather than just changing perceptions. As mentioned in an earlier response, when considering community interventions with audiences we would suggest ASC works through groups or third sector organisations that already engage with the target audience. Whether it is an intervention, a new policy, an environmental change, or a community programme, it is important to engage with these audiences to better understand their needs and ensure solutions, for example new footways and cycle paths, are user focused.

Clubs and sport sector are happy to be accountable for good user experience, participation rates and registration numbers but this should be broadened to consider population-level inactivity along with the health and wellbeing of their members and local community. To support the sport sector with this shift, we must foster an environment within the sporting workforce where all staff are trained in behavioural change to ensure every contact counts, demonstrate competencies and train staff effectively. Offer accreditation schemes for inclusivity for example disability friendly, dementia and mental health aware and friendly. Even provide facilities such as crèches to support parents to be active. Adopt cultural change through training and awareness of the workforce on the benefits and importance of everyone, regardless of age and ability to move more. This could involve training and mentoring programmes but critically it's about a cultural shift that ensures physical activity and sport becomes the norm. Sport facilities also offer the ability to link with active travel programmes offering use of their facilities to change and shower end-route to work? Or provide incentives for active travelling to games and matches or taking children to practice.

## 9. How do we ensure sport delivery bodies (e.g. Australian Sports Commission, State Departments of Sport and Recreation, National Sporting Organisations etc.) and health promotion organisations work together as effectively as possible to improve population health?

### In Short

- Define and scope the capability and capacity of the sport and physical activity sector to target inactive and least advantaged groups to enhance health and wellbeing outcomes through movement.
- Agree on one single metric for movement which creates a shared language and narrative across multi sector organisations – we recommend “**movement minutes**”.
- Develop a consensus statement on the role of sport in promoting the health and wealth of inactive and least advantaged target populations.
- Develop robust and consistent systems for the evaluation of sports and physical activity programmes which are agreed across multi sector.
- Have a clear call to action for all elements of the sector to engage and commit.
- Co-locate services uniting sport, physical activity people and services
- Ensure that national policy is cross-sectoral and well-coordinated
- Foster a thriving and sustainable voluntary and community sector
- Provide a coherent standardised measurement framework Embed the principle of co-production at all levels of the system Develop an overarching co-ordination role through the development of an innovation centres that unite academics, policymakers, federal, state and local implementation providers.

### The Details

Develop a network of national centres for sport and physical activity policy which delivers education, research, and support for the sport sector. This should be a collaboration of universities, healthcare, social care, state and federal government, sporting organisations, physical activity, and community organisations to name a few. This would unite a depth and breadth of expertise across the movement spectrum which not only ensures carries out world class and internationally relevant research but also ensure an up to date and efficient delivery sector that meets the needs of the Australian population. We would recommend that co-occupancy groups are created that bring together people and sectors from all cross-departments including transport, environment, planning, housing, education, school, sport, health. An example where there has been adopted and implemented with success are the development of the National Centres for Sport and Exercise Medicine in the UK. There must be clear lines of communication and accountability for this group. The Sheffield National Centre for Sport and Exercise Medicine has adopted this approach in its implementation through the design, development of co-located services.

The vision of the NCSEM is to create a culture of physical activity in Sheffield. The aim is to do this using a ‘whole-systems’ approach combining; policy, environmental, community and individual level interventions and programmes of work. It is also intended to extend the reach of sport and exercise medicine by the co-location of sport and exercise medicine specialists, allied health practitioners, researchers, clinicians, and patients in an innovative and community focused hub and spoke capital facility model. Housing in one central hub clinical services, sporting clubs and physical activity programs. This not only provides a one stop shop for participants its crucially brings teams and people together from a range of disciplines. <sup>cc</sup>

---

<sup>cc</sup> <https://www.movemoreshelfield.com/> <http://www.ncsem.org.uk/about/>

All that in mind, there is no magic wand that will allow all organizations to come together irrespective of their own agendas and perspectives. That said, individuals bring capability, capacity, and intelligence and if united can maximize resource. To ensure that all bodies work collaboratively across the space, there must be an agreement of vision and shared goals and outcomes. "What are we all working to achieve?" This naturally fosters an environment of a united narrative, but critically a shared ownership of achieving the desired outcome. Looking to the UK, this was a critical transition for Sport England, where in support of the Supporting Future political strategy, Sport England agreed 5 outcomes in their 'towards an active nation' which were 1) physical wellbeing 2) mental wellbeing 3) social and community development 4) individual development 5) economic development. Crucially develop an outcome based model which frees up funding around these areas to ensure investment into these is consistent and is promoted.

Health and wellbeing outcomes are at the heart, are the core business which unites the entire physical activity, fitness, exercise, recreation, and sport sector. With that, we must align our language to ensure everyone has a shared vision, a clear process on how to achieve this and clear measurement tools to ensure progress is monitored, recorded, and can be represented in a useful and relevant format. Collate progress against these outcomes in a consistent way will help move the sector forward in some ways, irrespective of funding.

Participants, spectators, and volunteers were put at the heart of the strategy. The importance of setting these broad, open, and transparent outcomes should not be underestimated. Outcomes not only united a sector to all focus how they could contribute towards a shared goal, but it also allowed a consistent, standardized approach to monitoring and evaluation with the development of a consistent framework for success.

There is a need for clear training standards and a quality assurance framework to enhance skills and capability of the sector that is continually reviewed and audited independently.

Develop a charter for mental health which composes of sport physical activity including ex-professional players that have suffered mental illness. This would help raise the profile of wellbeing and encourage physical activity for its broadest benefits, and help promote positive public health messages using role models and ambassadors to fight the stigma of mental health. Develop platforms to share best practice and learning across networks and resources.

There is a growing body of literature, particularly from the healthcare sector that to improve the health and wellbeing of individual's and improve the quality of service delivery, individuals and communities should be active in co-creating services within the offer along with the sector staff who will be supporting them, and not just passive recipients. Evidence is growing for more person and community centered approaches due to its ability to build strong, resilient communities and social networks. The learning from value report produced in the UK highlight that critically successful implementation of locally based programs is heavily influenced by the local context such as passionate individual's driving change, and that sometimes the barrier between national and local providers create unintentional barriers. National bodies have a crucially important role in identifying and reducing/removing avoidable barriers.

National bodies should focus on people as well as systems: people focused approaches offer significant potential to change relationships between individual's and sport/pa staff they interact with as well as between clubs/services and the communities they are set up to serve. National policy could encourage local clubs/recreational services to focus on workforce health along with the informal workforce.

National policies should be and well-coordinated. Joint statements reinforcing long term commitment across multi-sector agencies, demonstrating a call to action from the highest level on bold transformational change.

A coherent measurement framework that helps to unlock barriers: develop a core set of national outcomes focused on what matters to people and communities and as a national body, provide practical

support to local areas around measuring outcomes. Could also support the understanding of how existing data can provide a richer picture of services and how they are supporting people to achieve the outcomes that matter.

A key priority should be to agree the sport and pa sector agree the purpose and content of a single simplified cross system outcomes framework based upon outcomes that matter to people and communities.

Embed co-production at all levels of the system: effective policy initiatives are those that have involved target groups in the identification of the need for change with solutions co-designed and co-produced by;

## Major Sporting Events – Question 15

### 15. How should governments prioritise investment in major sporting events?

#### In Short

- A greater level of control and use of best practice could be applied to the bid process for major international sporting events.
- A Major Sporting Events Taskforce of the Office of Sport, the ASC and Tourism Australia should jointly develop a strategy, bidding framework and review panel for major international sporting events, working with States, Territories, and the sports sector.
- The AIS should also work with the sports to identify event opportunities that would enhance the sports' high performance outcomes by having 'home events' (e.g., World Cups etc.).
- This group would evaluate the net benefit to Australia of hosting an event in consultation with the relevant State and Local Governments and sports.
- A neglected aspect of hosting major events is the opportunity to promote the "Healthy Stadia" concept as has been developed through the European Healthy Stadia Network; this concept should be evaluated in Australia.
- Another proven concept yet to be exploited in Australia is the "Football Fans in Training" model; this should also be piloted.

#### The Details

Governments will have many criteria to consider about investment (and returns on investment / value of investment) in major sporting events – these may typically include trade, tourism, and investment. Whilst a boost to community participation in sport and physical activity is frequently advanced as one of the legacies from Olympic Games and other major events, the evidence suggests that this is not realised. Positive attitudes among inactive members of the public and a desire to become actively engaged has been reported in qualitative research, but translating this into a boost in participation likely requires a re-think of the offer provided by sports organisations so that it is more appropriate for the inactive segment of the community<sup>[2]</sup>. Overall, caution is advised on the likely benefit to the c, given that it has been concluded that mega-sporting events are liable to inaccurate sporting impact studies which may overstate benefits, understate costs and misuse multipliers.<sup>dd</sup> The recent Intergenerational Review of Australian Sport <sup>ee</sup>concluded that:

- A greater level of control and use of best practice could be applied to the bid process for major international sporting events.

---

<sup>dd</sup> <http://iea.org.uk/sites/default/files/publications/files/upldeconomicAffairs340pdfSummary.pdf>

<sup>ee</sup> BCG. Intergenerational Review of Sport 2017. Australian Sports Commission.

- A Major Sporting Events Taskforce of the Office of Sport, the ASC and Tourism Australia should jointly develop a strategy, bidding framework and review panel for major international sporting events, working with States, Territories, and the sports sector.
- The AIS should also work with the sports to identify event opportunities that would enhance the sports' high performance outcomes by having 'home events' (e.g., World Cups etc.).
- This group would evaluate the net benefit to Australia of hosting an event in consultation with the relevant State and Local Governments and sports. The infrastructure, administration and hosting cost would be compared to the broader benefits to Australia, with priority given to events that:
  - Leave an ongoing legacy in areas such as trade, tourism, and investment;
  - Support Australia's high performance and help achieve our high performance targets;
  - Contribute to our international sports diplomacy goals;
  - Maximise the use of existing high performance infrastructure;
  - Have the potential to deliver a significant participation uplift; and
  - Are led by a well-resourced, highly capable team, including within the sport.

This position from the Boston Consulting Group is supported in principle, with the proviso that achieving the elusive 'participation uplift' requires multiyear integrated and well-funded programmes to promote physical activity. Without a major effort in this regard, the legacy of a more active community from major sporting events may remain more rhetoric than reality.[2-6]. The London Olympics was noteworthy for the innovative use of 'ambassadors' taking the message ('inspired by 2012') back to the local community level and for the transparent and longer term reporting on the fulfilment of the legacy aspirations.[7] This provides a fine example for Australia and other nations to follow.

A neglected aspect of hosting major events is the opportunity to promote the "Healthy Stadia" concept as has been developed through the European Healthy Stadia Network <sup>ff</sup>. This concept should be evaluated in Australia. Another proven concept yet to be exploited in Australia is the "Football Fans in Training" model. Football fans in training<sup>gg</sup> (FFIT) programme is a healthy living and weight loss programme that was carefully designed to appeal to men. It incorporates the latest scientific approaches to weight loss, physical activity and diet and taps the potential of professional football clubs to engage overweight and obese men in weight loss. It has been developed and successfully evaluated in a major research project led by the University of Glasgow. It is possible that this could be piloted through innovation programs to transfer some of the key learning across other target populations including urban and rural communities, indigenous populations and young females, pregnant women along with other sports such as netball as well as tailored for individuals with chronic conditions. Macmillan Cancer care in the UK collaborated closely with Sport England to develop such innovation, and the lead author was the program lead for this.<sup>hh</sup>

---

<sup>ff</sup> [www.healthystadia.eu](http://www.healthystadia.eu)

<sup>gg</sup> <http://dev.ffit.org.uk/>

<sup>hh</sup> [www.macmillan.org.uk/fundraising/inyourarea/england/derbyshire/local-news/supporttohelpsheffieldcancersurvivorsgetactive.aspx](http://www.macmillan.org.uk/fundraising/inyourarea/england/derbyshire/local-news/supporttohelpsheffieldcancersurvivorsgetactive.aspx)

**17 What should be the roles for national, state/territory and community sporting organizations to grow Australian sport?**

**In Short**

- Drive sustained participation growth among all Australian via sporting organisations;
- Fully integrate sport into relevant government policy;
- Agree a shared vision for sport in Australia and create a more cohesive sector;
- Foster stronger and more sustainable sports organisations;
- Ensure and foster the development of intersector working among the agencies that influence participation in the broadest sense (e.g. transport, planning)
- Further modernise and coordinate the international high performance system;
- Optimise athlete development pathways in the international high performance system;
- Investment: Increase the magnitude and impact of sports (participation) funding;
- Intelligence: Improve data and technology use, to drive participation and high performance outcomes; and
- Infrastructure: Work with state and local governments to ensure the quality and availability of community sports infrastructure.

**The Details**

The Intergenerational Review of Australian Sport provides a compelling analysis which directly addresses this question. The key messages are those provided in the summary above and will not be repeated here given that the Australian Sports Commission commissioned the report. This question could also be re-framed to ask how to get better accountability for sport, recreation, and physical activity sectors across and between state and federal organizations. An infrastructure must be developed that closes the gap between the federal, state and local levels, and that advocates for shared learning and practice whilst critically adopt a shared vision and narrative around how as a country and whole sector we encourage and enable all Australians to move more, every day in whichever way that suits them. A challenge here for Sport is how to make sure it is not isolated in its drive for increased activity amongst Australians? The answer must be cross cultural. This has been observed in other countries, for example Sport England and Public Health England yet there is some way to go when you assess implementation and impact on a regional level. What has been achieved in the UK is a champion voice owning and advocating physical activity, and that is the opportunity here for the ASC. There is a critical need to ensure the development of cross-sectoral groups that enhance intersector working to highlight and reinforce the impact of physical activity and critically reducing inactivity on all aspects of the broader determinants of health including housing , welfare and employment.

## **18. How can sporting organisations (national, state/territory, community) better play a role in getting more Australians active?**

### **In Short**

- There must be reform across all levels of government and sporting and physical activity agencies if collectively we are to focus and strive for more Australians to move more at any age.
- There must be legislative change, like those observed in New Zealand where the reach of sport is allowed to be widened and the role of sport AND physical activity is recognised in public health.
- A public health minister who is selected and chairs a cross ministerial committee for movement (physical activity and sport).
- There must be clear, ring-fenced budget allocations with accountability for outcomes (specifically focused on participation)
- There must be an emphasis on increasing health enhancing physical activity through a cross-sectoral, multi-agency approach to tackling inactivity.

### **The Details**

This is really a participation based question as governance refers to lines of accountability, clarity of responsibility, communication structures and who reports into whom. Continuing with this thread, the question from our perspective is how can we achieve improvement in the lines of accountability and communication between state and federal governments and enhance the role of ASC or equivalent body to drive forwards the participation agenda. There must be a development in the infrastructure throughout all levels of government and sporting and physical activity agencies if collectively we are to focus and strive for more Australians to move more at any age. To do this, as mentioned in other responses there must be clear ring fenced budget with accountable outcomes specifically focused on participation, increasing physical activity for health enhancing behaviours but critically have the cross sector, multi-agency approach to tackling inactivity.

#### **1. Have a plan**

Establish an over-arching National Plan of Action to tackle declining levels of physical activity, to be reviewed annually and progress reassessed every 5 years against its goals.

#### **2. Ensure cross-party agreement**

Ensure a cross-political party commitment from leaders to supporting the development and implementation of the National Plan of Action within Government, Parliament and beyond.

#### **3. Ensure cross-sector agreement**

Create a cross-sectorial, cross-government departmental drive to construct and implement a framework for the measurement and increase of Physical Activity across the board. This can ensure a collaborative approach to funding, commissioning, delivering investments, policies, and interventions, with a focus on the first 15 years of life.

#### **4. Deliver Oversight, Accountability**

Establish an independent body to have oversight and ensure accountability for progress on both development and implementation of the National Plan of Action at both a national and local level

#### **5. Long-term commitment**

Establish a cross cutting 10-year physical activity and sport strategy with implementation indicators that are independently evaluated and audited on an interim basis for the purposes of assessing change.



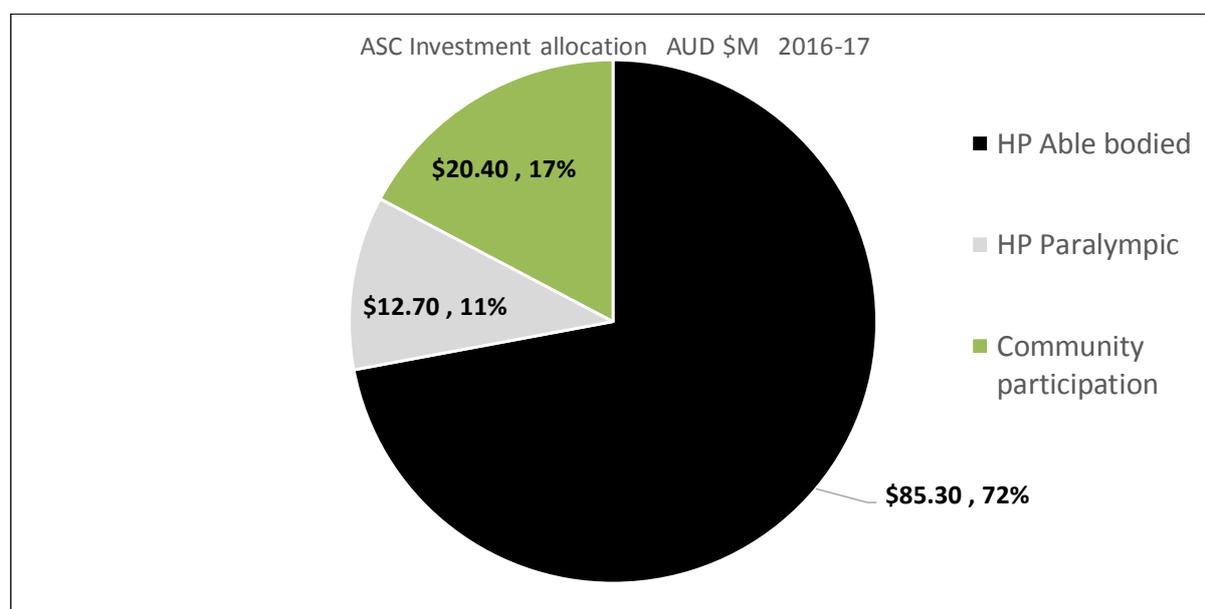
**23. Given governments have limited budgets how should they allocate funding across high performance and community sport?**

**In Short**

Current funding allocations are at odds with the goal of increasing community participation with 83% to high performance and 17% to community; this is probably the inverse of the desirable resource allocation formula. Going forward, it may be that a more balanced portfolio of investment may be achieved through supplementary funding provided by a national good causes lottery.

**The Details**

Figure 2 shows the current investment pattern for High Performance (Able-bodied/ Paralympic) and Community Participation. Without arguing against appropriate funding of our high performance athletes and athletes, the investment allocations seem totally at odds with an aspiration to get everybody active everyday (which is what we hope the National Sports Plan will accommodate). This doesn't require further detailed analysis – the current investment priorities are self-evident. Going forward, it may be that a more balanced portfolio of investment may be achieved through supplementary funding provided by a national good causes lottery.



**Figure 2** Australian Sports Commission: investment breakdown 2016-2017 (83% High performance; 17% Community participation)

## 24. Do you support the introduction of a national good causes lottery to increase the funding available for Australian athletes and to increase participation in sport?

### In Short

A national good causes lottery to increase the quantum of funding for participation is to be welcomed. The UK provides the most relevant information on how this might be approached, with emphasis on community participation. A useful analysis provided by Social Policy Section of the Australian Department of Parliamentary Services should be re-examined.

### The Details

- National lottery funding for sport is an established practice internationally, with dedicated proceeds in many countries going to support government investment in sport (i.e. events, infrastructure, programs, athletes).<sup>ii</sup>
- A strong argument used when promoting National Lottery contributions to sport is the input from non-government dependant revenue streams.
- The potential impact of lottery funding as a contributor to enhancing international competitiveness in sport is best illustrated by the more recent success of the United Kingdom (Team GB) at Olympic and Paralympic Games since the introduction of National Lottery contributions to sport funding in 1997.
- Any form of gambling (legal or otherwise) presents potential risks that some degree of social or personal harm may result.
- Perhaps one of the most detailed analysis of funding has been provided in the 2013 report by Dr Rhonda Jolly – of the Social Policy Section of the Australian Department of Parliamentary Services – this analysis should be revisited.<sup>jj</sup>

## 25. What other forms of non-government revenue could be used to help Australian athletes and increase participation in sport?

### In Short

- Potential revenue streams include, but are not limited to (a) Global Sports Innovation Centres; (b) Social Impact Investment and (c) Partnership/Sponsorship
- An ethics-based approach to partnerships and sponsorships is required, especially for so-called ‘junk food’, sugar-sweetened beverages (SSBs), alcohol and gambling, where the values of the Australian community are increasingly at odds with the sports sector.

### The Details

There are opportunities to collaborate with the corporate sector in a variety of ways. One example is the Global Sports Innovation Centre<sup>kk</sup>; another is the concept of Social Impact Investment.<sup>lmm</sup> Social impact investing is an emerging, outcomes based approach that brings together governments, service providers, investors, and communities to tackle a range of social issues. Draft policy documentation proposes that the Australian Government could primarily support social impact investing by creating an enabling environment for private sector-led social impact investing and by funding (or co-funding with State and Territory Governments) investments which generate savings or avoided future costs to fund reforms and deliver better outcomes for Australians

---

<sup>ii</sup> [https://www.clearinghouseforsport.gov.au/knowledge\\_base/organised\\_sport/funding/sport\\_lottery\\_funding](https://www.clearinghouseforsport.gov.au/knowledge_base/organised_sport/funding/sport_lottery_funding)

<sup>jj</sup> [http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/2550377/upload\\_binary/2550377.pdf;fileType=application/pdf](http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/2550377/upload_binary/2550377.pdf;fileType=application/pdf)

<sup>kk</sup> <http://sport-gsic.com>

<sup>ll</sup> <http://www.osii.nsw.gov.au/>

<sup>mm</sup> <http://www.treasury.gov.au/ConsultationsandReviews/Consultations/2017/Social-impact-investing>

The building blocks of effective government engagement with the diverse range of private sector entities are:

- strong regulatory frameworks, both statutory and self-regulatory;
- a multi-stakeholder platform for implementation, monitoring and evaluation;
- a robust mechanism to review and ensure effective commitments and contributions;
- the use of measures, including incentives, to encourage a strong private sector contribution;
- transparent management of conflict of interest; and
- sharing of knowledge and data to support collective national and global action

It is important to acknowledge the need for an ethics-based approach to partnerships and sponsorships. This is especially relevant in the case of “junk food: companies, multinationals responsible for marketing and sale of sugar-sweetened beverages (SSBs), alcohol and gambling. Accepting sponsorship and advertising from these companies is increasingly at odds with the expectations of the wider Australian community and needs careful consideration.<sup>nn</sup>

---

nn

[https://www.clearinghouseforsport.gov.au/knowledge\\_base/organised\\_sport/sports\\_administration\\_and\\_management/ethical\\_sponsorship\\_and\\_advertising\\_in\\_sport](https://www.clearinghouseforsport.gov.au/knowledge_base/organised_sport/sports_administration_and_management/ethical_sponsorship_and_advertising_in_sport)

## Appendix A Best Practice Evidence Summary

### GLOSSARY

Strong evidence	'Strong evidence' indicates high confidence that the evidence reflects the true effect and further research is very unlikely to change our confidence in the estimate of the effect
Moderate evidence	'Moderate evidence' indicates moderate confidence and further research may change our confidence and the estimate
Weak evidence	'Weak evidence' indicates low confidence and further research is likely to change our confidence and the estimate
Insufficient evidence	'Insufficient' indicates that either a body of evidence is unavailable or there was a paucity of studies of reliable quality for the setting / strategy in question

Assessment of evidence was undertaken in keeping with the [protocols of the US Department of Health and Human Services Community Preventive Services Task Force](#)

STRATEGIES & SETTINGS	POPULATION		
	Children aged 0-4	Children aged 5-12	Young people aged 13-18
<b>Childcare /pre-school</b>	<b>Strong evidence[8]</b> Interventions targeting Fundamental Movement Skills [FMS] in pre-schoolers may increase PA and reduce sedentary time. Teacher-Led interventions were effective whereas Child-Centred and Parent-Led programs are not yet proven.	Not applicable	Not applicable
<b>Education</b>	Not applicable [covered under childcare/pre-school]	<b>Strong evidence[9-12]</b> There is strong evidence for 'enhanced' school-based physical education (PE) in primary schools. Interventions include: <ul style="list-style-type: none"> <li>Teaching strategies (e.g., modifying games, substituting less active games with more active games)</li> <li>PE lesson plans that incorporate fitness and circuit training activities</li> <li>Well-designed PE curricula taught by trained teachers.</li> <li>Programs that combine enhanced school-based PE with other school- and community-based interventions such as student health education about physical activity, activities that foster family involvement, and community partnerships to increase opportunities for physical activity.</li> </ul>	<b>Strong evidence[9, 10, 12-19]</b> There is strong evidence for 'enhanced' school-based physical education (PE) in secondary schools. Enhanced school-based PE involves changing the curriculum and course work for students to increase the amount of time they spend engaged in moderate- or vigorous-intensity physical activity during PE lessons. Interventions recommended are as for the primary phase <ul style="list-style-type: none"> <li>Extra efforts are required for secondary schools in disadvantaged areas and in rural areas, for female and for less experienced teachers</li> <li>Additional research on the long-term impact of these interventions is needed.</li> </ul> Quasi-experimental evidence of success in Canadian schools[18] There is a need to verify longer term impacts of programs with older adolescents.[17]
<b>Sport clubs and organisations</b>	<b>Insufficient evidence.</b> The Ready Steady Go Kids program is designed to introduce pre-schoolers to the fundamentals of 10 different sports (soccer, tennis, basketball, hockey, golf, AFL, rugby, athletics, cricket and T-ball) but the review did not locate any evaluation data.[20]	<b>Moderate strength evidence[21]</b> Sport England has identified 10 principles for developing projects and services to tackle inactivity. PHE evidence review concluded (i) programming should target and engage inactive people (ii) engage users in design of locally-embedded physical activity programmes and (iii) deliver services that support inclusive opportunities for physical activity (e.g., inclusion fitness initiative-accredited gyms, equity statements. Strong evidence[22] for prevention, improvements in strength, balance, gait and motor skills, and maintaining a healthy weight. Weak evidence [16, 23] that Sport may be associated with improved psychosocial health beyond improvements attributable to participation in PA. Specifically, team sport seems to be associated with improved health outcomes compared to individual activities, due to the social nature of the participation.	
		No additional evidence	<b>Tailored sport offerings</b> which consider the preferences and interests of adolescents may be more effective.[24]
<b>Home and Family</b>	<b>Insufficient evidence[25]</b> Only parental monitoring/ maternal role-modelling has been shown to be positively associated with change in PA among younger children. More evidence dealing with community and policy domains and about lesser-explored modifiable family- and childcare-related determinants is urgently required.	<b>Strong evidence[26-28]</b> Interventions include one or more of the following: <ul style="list-style-type: none"> <li>Goal-setting tools and skills to monitor progress, such as a website to enter information;</li> <li>Reinforcement of positive behaviour, e.g. reward charts or role modelling of physical activity by parents or instructors</li> <li>Organized physical activity sessions, such as instructor-led opportunities for active games</li> <li>Interventions may also address reducing screen time</li> <li>level of parental involvement, rather than the setting itself, appeared an important determinant of intervention success.</li> </ul>	<b>Insufficient evidence</b> Participant age is identified as a determinant of intervention outcomes. Interventions with pre-school and primary school-aged children appear to be more effective but evidence is lacking for adolescents. Domestic gardens may be an important area for higher intensity physical activity as noted in the section on parks/green space.
<b>Community-wide strategies</b>	Not applicable	<b>Insufficient evidence [29, 30]</b> Available evidence suggests that family and home (see above) is more effective and there is a lack of evidence to verify the impact of community-wide strategies for children and adolescents. The 'Callovian' initiatives in several cities show promise (see 'Other Strategies') and it is possible that these may influence children/adolescents as well as adults.	

STRATEGIES AND SETTINGS	POPULATION		
	Children aged 0-4	Children aged 5-12	Young people aged 13-18
<b>Parks and Active Play/ Urban green space</b>	<b>Weak evidence</b> [31] <b>Parks &amp; play equipment</b> Research evidence is very limited. Observational studies show positive associations between play equipment and children's physical activity level. Decreased playground density and increased recess duration appear to improve outcomes.	<b>Moderate strength evidence</b> [32, 33] <b>Urban Green Space Interventions</b> can be effective when (i) physical improvement to the green space is coupled with a social engagement/participation element that promotes the green space and engages new target groups; (ii) interventions are co-signed with the local community; and (iii) integrated within local development strategies and frameworks (e.g. urban masterplans, housing regulations, transport policies, sustainability, and biodiversity strategies). Stronger effects on 13-18. MVPA was more likely in those exposed to higher levels of greenspace compared to sedentary individuals; Domestic gardens may be an important area for higher intensity activity.	
<b>Primary Health Care and Health Services</b>	<b>Insufficient evidence</b> Effective interventions will likely focus on individual- or family-level behaviour changes through home visits, individual counselling, or group sessions in clinical settings; PA-specific evidence is not yet available.[34]	<b>Moderate strength evidence</b> [35] As a treatment modality for overweight and obese children physical activity can be effective for reducing percent body fat. Insufficient evidence for reducing other measures of adiposity.	<b>Moderate strength evidence</b> [35, 36] As a treatment modality for overweight and obese adolescent's physical activity can be effective for reducing percent body fat and BMI.
<b>Built environment / Active travel</b>	<b>Strong evidence</b> [37-43] The evidence is assessed as strong (recommended by the CPSTF) for built environment approaches that combine one or more interventions to improve pedestrian or bicycle transportation systems with one or more land use and environmental design interventions. Coordinated approaches must combine new or enhanced elements of transportation systems with new or enhanced land use and environmental design features. Intervention approaches must be designed to enhance opportunities for active transportation, leisure-time physical activity, or both. Walking to and from school makes a meaningful contribution to % of individual schooldays MVPA (23% primary and 36% secondary school respectively); which in turn is a modest contribution to total individual and population PA.[44]  [45] Built environment approaches appear effective for younger ages; more studies are needed to corroborate for this sub-population.	[33, 39, 45-48] Walking to school gives <b>modest</b> increases in activity compared with transport by car or bus; greater % of activity may occur in streets and urban venues (40-80%) than in green spaces (20-50%); more than half of children's outdoor activity tends to occur with a parent nearby. School distance of 2 km is associated with the best PA outcomes related to active transport (9% to 15% increase on weekdays).[49] Program design needs to be high-intensity, use infrastructural <b>and</b> behavioural intervention, be gender-specific, address car dependency and focus on travel home from school initially.[50]	[33, 39, 51, 52] Adolescents benefit more than younger children from built-environment features that encourage walking and those designed or used for neighbourhood play. For active travel to school, distance of approximately 2 km is associated with the best physical activity outcomes related to active transport (9% to 15% increase on weekdays).[49]
<b>Social marketing and mass media campaigns [SMMC ]</b>	Not applicable	<b>Strong evidence</b> [53-59] <b>SMMC</b> using multiple channels, one of which <b>must</b> be mass media, combined with the distribution of free or reduced-price PA-related products/services are effective. <b>Providing selected communities with a higher dose of marketing activities and sustaining those activities over time yields more positive outcomes.</b> The products/services should be designed to: <ul style="list-style-type: none"> <li>Facilitate adoption and/or maintenance of health-promoting behaviours (i.e., increased physical activity through pedometer distribution combined with walking campaigns).</li> <li>Facilitate and/or help to sustain cessation of harmful behaviours (inactivity, prolonged sitting).</li> <li>Protect against behaviour-related disease or injury (recreational safety helmets, sun-protection products).</li> </ul>	<b>Strong evidence</b> [53-57] <b>SMMC</b> using multiple channels, one of which <b>must</b> be mass media, combined with the distribution of free or reduced-price PA-related products/services are effective. The products/services should be designed to: <ul style="list-style-type: none"> <li>Facilitate adoption and/or maintenance of health-promoting behaviours (i.e., increased physical activity through pedometer distribution combined with walking campaigns).</li> <li>Facilitate and/or help to sustain cessation of harmful behaviours (inactivity, prolonged sitting).</li> <li>Protect against behaviour-related disease or injury (alcohol, violence, recreational safety helmets, sun-protection products).</li> </ul>
<b>Incentive and voucher schemes</b>	Not applicable	<b>Moderate strength evidence</b> There is strong evidence that creating or enhancing access to places for physical activity and providing informational outreach is effective and may achieve up to a 25% relative increase in the proportion of the population who are physically active at least three times per week. This must be tempered applied with caution in the case of voucher schemes, where multi-component programs rather than vouchers in isolation are supported.[60-62] Evidence of longer-term impact of these schemes is required so that longitudinal research is a high priority for voucher schemes which are increasingly being implemented in Australia.	

STRATEGIES AND SETTINGS	POPULATION		
	Young adults aged 18-39	Adults aged 40-64	Adults aged 65+
<b>Workplace</b>	<b>Moderate strength evidence</b> [63, 64] Short, simple exercise or fitness programs (1–2 modal components) appear to provide similar benefits to those using more complex multimodal interventions. Workplace PA interventions significantly reduce general musculoskeletal pain and neck and shoulder pain.[65] Limited evidence supports the role of workplace team sports in promoting individual employee health, group cohesion and performance and organisational benefits such as the increased work performance.[66] The integrated Total Worker Health is emerging as a preferred model in USA.[67]		Not applicable
<b>Education</b>	<b>Moderate strength evidence</b> [68] Interventions integrated within the university/college setting and making use of fitness / recreational assets can be effective. Systematic Review showed 18/29 PA interventions had significant results, Frequent feedback and professional contact appeared to be associated with success.	Insufficient evidence	
<b>Sport clubs and organisations</b>	<b>Moderate strength evidence</b> [69] Large cohort studies suggest participation in sport is associated with a 20-40% reduction in all-cause mortality compared with non-participation. Randomised trials and crossover clinical studies suggest that playing sport is associated with health benefits. Limited evidence supports the role of workplace team sports in promoting individual employee health, group cohesion and performance and organisational benefits such as the increased work performance.[66]		
	<b>Weak evidence</b> [70] Sports participation can improve social capital and mental health in disadvantaged communities.	<b>Weak evidence</b> [71] that sport and physical activity participation can support the well-being and rehabilitation of disabled and able-bodied combat veterans diagnosed with Post-Traumatic Stress Disorder (PTSD)	<b>Weak evidence</b> [72] that traditional Chinese sports activities such as Tai Ji Quant and Qigong can impact risk factors for NCDs common among older Chinese adults, including stroke, malignant neoplasms, heart disease, COPD, and diabetes
<b>Community-wide strategies</b>	<b>Strong Evidence</b> [73-75] <b>Community-wide campaigns using highly visible, broad-based, multicomponent strategies</b> (e.g., social support, risk factor screening, health education) are effective; may focus on physical activity alone or include other CVD risk factors; interventions using personal contact as well as tailored interventions are more effective. Building, strengthening, and maintaining social networks that provide supportive relationships for behaviour change (setting up a friend system, making contracts with others to complete specified levels of physical activity, or setting up walking groups or other groups to provide friendship and support) are effective. interventions using personal contact as well as tailored interventions may be more effective. The 'Callovian' initiatives in several cities show promise and it is possible that these may be effective (see 'Other Strategies')		
	No additional evidence	<b>Strong evidence</b> [76, 77] <b>supervised resistance and/or aerobic training</b> improves measures of physical function especially among frail elderly. Participating in resistance exercise, even less than 1 hour per week, lowers risk of developing metabolic syndrome, independent of aerobic exercise.[78] <b>Evidence supports the effectiveness of a variety of interventions</b> , including group delivered, centre-based and cognitive approaches on short-term uptake of PA behaviour.[79]	
<b>Parks and Active Play/ Urban green space</b>	<b>Moderate strength evidence</b> [32] <b>Urban Green Space Interventions</b> can be effective when (i) physical improvement to the green space is coupled with a social engagement/participation element that promotes the green space and engages new target groups; (ii) interventions are co-signed with the local community; and (iii) integrated within local development strategies and frameworks (e.g. urban masterplans, housing regulations, transport policies, sustainability and biodiversity strategies). <b>Weak evidence</b> [14] <b>School playground modification.</b> A quasi-experimental study of playground reconstruction in London schools showed very limited effects on physical activity, but reduced sedentary in younger children only. Qualitative data suggested that the children enjoyed the new playgrounds and experienced a perceived positive change in well-being and social interactions.		

STRATEGIES AND SETTINGS	POPULATION		
	Young adults aged 18-39	Adults aged 40-64	Adults aged 65+
<b>Primary Health Care and Health Services</b>	<p><b>Strong evidence</b> [80, 81] Exercise as a treatment modality for high-risk populations Diet and physical activity promotion programs for people at increased risk of type 2 diabetes (T2DM) is effective in reducing new-onset T2DM. Combined diet and physical activity promotion programs also increase reversion to normoglycemia (normal blood sugar) and improve diabetes and cardiovascular disease risk factors, including overweight, high blood glucose, high blood pressure, and abnormal lipid profile. Combined diet and physical activity promotion programs are effective at decreasing diabetes incidence and improving cardiometabolic risk factors in persons at increased risk. More intensive programs are more effective.[82-84]. Physical Activity only interventions are also cost-effective, especially where direct supervision or instruction is not required. Walking, exercise groups, or brief exercise advice on prescription delivered in person, or by phone or mail may be more cost-effective than supervised gym-based exercise classes or instructor-led walking programmes. For non-high-risk populations, individuals who are interested and ready to <b>make</b> behavioural changes may benefit from behavioural counselling.[85, 86] <b>Moderate strength evidence</b>[87, 88] <b>Exercise referral schemes</b> result in a small improvement in the number of people who increase their levels of physical activity. Cost-effectiveness analysis indicates that the ICER for ERSs compared with usual care is around £76,000 per QALY. Brief interventions are effective in the short term but long-term impact is unproven.[89] Multiple sessions with patients may facilitate long-term adherence [90]</p>		
	Nurse-delivered physical activity interventions are effective overall. Tailored techniques such as providing “stage of change”-specific strategies or helping patients set individualized goals appeared most successful.[91]	Pedometer-based walking interventions for inactive 45- to 75-y-olds delivered by post or through primary care nurse-supported physical activity (PA) consultations may be effective in the short term but long-term impact is unproven.[92] Evidence supports the use of goal setting and self-monitoring of behaviour when counselling overweight and obese adults.[93]	
<b>Built environment / Active travel</b>	<p><b>Strong evidence</b>[37-39, 94] The evidence is assessed as strong (recommended by the CPSTF) for built environment approaches that combine one or more interventions to improve pedestrian or bicycle transportation systems with one or more land use and environmental design interventions. Coordinated approaches must combine new or enhanced elements of transportation systems with new or enhanced land use and environmental design features. Intervention approaches must be designed to enhance opportunities for active transportation, leisure-time physical activity, or both. Corroborative lifestage-specific evidence is provided below as available.</p>		
	<p><b>Moderate strength evidence</b> Quasi-experimental evidence that active modes (walking &amp; cycling) can be increased by about 30% but more corroborative studies needed to confirm that this translates to an overall increase in population prevalence of physical activity [52, 95]</p>		
<b>Social marketing and mass media campaigns [SMMC]</b>	<p><b>Strong evidence</b> [53-57, 96] <b>SMMC</b> using multiple channels, one of which <b>must</b> be mass media, combined with the distribution of free or reduced-price PA-related products/services are effective. The products/services should be designed to:</p> <ul style="list-style-type: none"> <li>Facilitate adoption and/or maintenance of health-promoting behaviours (i.e., increased physical activity through pedometer distribution combined with walking campaigns).</li> <li>Facilitate and/or help to sustain cessation of harmful behaviours (inactivity, prolonged sitting).</li> </ul> <p>Protect against behaviour-related disease or injury (alcohol, violence, recreational safety helmets, sun-protection products).</p>		
<b>Other strategies</b>	<p><b>Stairs - Strong evidence</b>[40-42] Point-of-decision prompts (motivational signs placed in or near stairwells or at the base of elevators and escalators) are effective in encouraging individuals to use stairs. NB Evidence supports the effectiveness of stair interventions in public settings; however, support remains limited for worksite settings. Cancer survivors physical function – Moderate strength evidence[97] Community-based interventions that met in groups and used behavioural change strategies were most effective; most studies are of breast cancer survivors. <b>Moderate strength evidence</b>[98-100] <b>Ciclovi</b>as : open streets programs that close major roads to motor vehicles so they can be used for bicycling, walking and leisure activities, have operated in South America and in some North American cities with promising results and indications (a Los Angeles study) that air quality as measured by ultrafine particle (UFP) and PM2.5 were reduced on-road by 21% and 49% respectively and that the community-wide PM2.5 reduction was 12%.[101]</p>		



## REFERENCES

1. Boston Consulting Group on behalf of the Australian Sports Commission (ASC) *Intergenerational Review of Australian Sport 2017*. 2017.  
[https://www.ausport.gov.au/nationalsportsplan/home/second\\_row\\_content/resources/Intergenerational\\_Review\\_of\\_Australian\\_Sport\\_2017.pdf](https://www.ausport.gov.au/nationalsportsplan/home/second_row_content/resources/Intergenerational_Review_of_Australian_Sport_2017.pdf)
2. Carter, R.V. and T. Lorenc, *A qualitative study into the development of a physical activity legacy from the London 2012 Olympic Games*. Health Promot Int, 2015. **30**(3): p. 793-802.
3. White, C., *Hopes for a health legacy from the Olympic games should focus on community not sport, says expert*. BMJ, 2011. **343**: p. d4204.
4. Bauman, A.E., Murphy, N., Matsudo, V., *Is a population-level physical activity legacy of the London 2012 Olympics likely?* J Phys Act Health, 2013. **10**(1): p. 1-3.
5. Lee, Y.H. and J.M. Kim, *Olympic Health Legacy; Essentials for Lasting Development of Host City*. J Lifestyle Med, 2013. **3**(1): p. 9-18.
6. Bauman, A., B. Bellew, and C.L. Craig, *Did the 2000 Sydney Olympics increase physical activity among adult Australians?* Br J Sports Med, 2015. **49**(4): p. 243-7.
7. Government of United Kingdom *Inspired by 2012: The legacy from the London 2012 Olympic and Paralympic Games - third annual report*. 2015.  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/452685/1662-B\\_Legacy\\_Report\\_2015\\_ACCESSIBLE.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/452685/1662-B_Legacy_Report_2015_ACCESSIBLE.pdf)
8. Van Capelle, A., Broderick, C. R., van Doorn, N., E. Ward R, Parmenter, B. J. *Interventions to improve fundamental motor skills in pre-school aged children: A systematic review and meta-analysis*. J Sci Med Sport, 2017. **20**, 658-666 DOI: 10.1016/j.jsams.2016.11.008.  
<https://www.ncbi.nlm.nih.gov/pubmed/28169146>
9. US Department of Health and Human Services Community Preventive Services Task Force *Behavioral and Social Approaches to Increase Physical Activity: Enhanced School-based Physical Education; Task Force Finding and Rationale Statement*. 2014.  
<https://www.thecommunityguide.org/sites/default/files/assets/PA-Behavioral-School-based-PE.pdf>
10. Hollis, J.L., Williams, A. J., Sutherland, R. ,Campbell, E. ,Nathan, N. ,Wolfenden, L. ,Morgan, P. J. ,Lubans, D. R. Wiggers, J. *A systematic review and meta-analysis of moderate-to-vigorous physical activity levels in elementary school physical education lessons*. Prev Med, 2016. **86**, 34-54 DOI: 10.1016/j.ypmed.2015.11.018.
11. Australian Bureau of Statistics (ABS) *Defining Sport and Physical Activity, a Conceptual Model*. ABS Catalogue No. 4149.0.55.001. 2008.  
[http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/5527537D36688787CA257508000F39D1/\\$File/4149055001\\_2008.pdf](http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/5527537D36688787CA257508000F39D1/$File/4149055001_2008.pdf)
12. Dobbins, M., Husson, H., DeCorby, K., LaRocca, R. L. *School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6 to 18*. Cochrane Database Syst Rev, 2013. Cd007651 DOI: 10.1002/14651858.CD007651.pub2.  
<https://www.ncbi.nlm.nih.gov/pubmed/23450577>
13. Sutherland, R., Campbell, E., Lubans, D. R., Morgan, P. J., Okely, A. D., Nathan, N., Gillham, K., Lecathelinais, C., Wiggers, J. *Physical education in secondary schools located in low-income communities: Physical activity levels, lesson context and teacher interaction*. J Sci Med Sport, 2016. **19**, 135-41 DOI: 10.1016/j.jsams.2014.12.003.
14. Hamer, M., Aggio, D., Knock, G., Kipps, C., Shankar, A., Smith, L *Effect of major school playground reconstruction on physical activity and sedentary behaviour: Camden active spaces*. BMC Public Health, 2017. **17**, 552 DOI: 10.1186/s12889-017-4483-5.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC5463303/>
15. Sutherland, R., Campbell, E., Lubans, D. R., Morgan, P. J., Okely, A. D., Nathan, N., Gillham, K., Lecathelinais, C., Wiggers, J., *Physical education in secondary schools located in low-income communities: Physical activity levels, lesson context and teacher interaction*. J Sci Med Sport, 2016. **19**(2): p. 135-41.
16. Mears, R. and R. Jago, *Effectiveness of after-school interventions at increasing moderate-to-vigorous physical activity levels in 5- to 18-year olds: A systematic review and meta-analysis*. British Journal of Sports Medicine, 2016. **50**(21): p. 1315-1324.
17. Hynynen, S.T., Van Stralen, M. M., Sniehotta, F. F., Araújo-Soares, V., Hardeman, W., Chinapaw, M. J. M., Vasankari, T., Hankonen, N., *A systematic review of school-based interventions targeting physical activity and sedentary behaviour among older adolescents*. International Review of Sport and Exercise Psychology, 2016. **9**(1): p. 22-44.
18. Hunter, S., et al., *A quasi-experimental examination of how school-based physical activity changes impact secondary school student moderate- to vigorous- intensity physical activity over time in the COMPASS study*. Int J Behav Nutr Phys Act, 2016. **13**: p. 86.

19. Sutherland, R., Reeves, P., Campbell, E., Lubans, D. R., Morgan, P. J., Nathan, N., Wolfenden, L., Okely, A. D., Gillham, K., Davies, L., Wiggers, J. *Cost effectiveness of a multi-component school-based physical activity intervention targeting adolescents: the 'Physical Activity 4 Everyone' cluster randomized trial.* Int J Behav Nutr Phys Act, 2016. **13**, 94 DOI: 10.1186/s12966-016-0418-2. <https://www.ncbi.nlm.nih.gov/pubmed/27549382>
20. RSGK Sports Pty Ltd. *Ready Steady Go Kids (RSGK). Multi-sports for 1.5 to 6-year-olds [Web Portal].* 2017. <https://www.readysteadygokids.com.au/>
21. Cavill, N., Adams, E., Gardner, S., Ruane, S. *Tackling Inactivity.* 2016.
22. England, S. *Review of Evidence on The Outcomes of Sport and Physical Activity. A Rapid Evidence Review.* 2017. <https://www.sportengland.org/media/11719/sport-outcomes-evidence-review-report.pdf>
23. Eime, R.M., Young, J. A., Harvey, J. T., Charity, M. J., Payne, W. R. *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.* Int J Behav Nutr Phys Act, 2013. **10**, 98 DOI: 10.1186/1479-5868-10-98. <https://www.ncbi.nlm.nih.gov/pubmed/23945179>
24. Manz, K., Krug, S., Schienkiewitz, A., Finger, J. D., *Determinants of organised sports participation patterns during the transition from childhood to adolescence in Germany: results of a nationwide cohort study.* BMC Public Health, 2016. **16**: p. 939.
25. Hesketh, K.R., O'Malley, C., Paes, V. M., Moore, H., Summerbell, C., Ong, K. K., Lakshman, R., van Sluijs, E. M. F. *Determinants of Change in Physical Activity in Children 0-6 years of Age: A Systematic Review of Quantitative Literature.* Sports Med, 2017. **47**, 1349-1374 DOI: 10.1007/s40279-016-0656-0. <https://www.ncbi.nlm.nih.gov/pubmed/27988875>
26. Brown, H.E., Atkin, A. J., Panter, J., Wong, G., Chinapaw, M. J. M., van Sluijs, E. M. F., *Family-based interventions to increase physical activity in children: a systematic review, meta-analysis and realist synthesis.* Obesity Reviews, 2016. **17**(4): p. 345-360.
27. US Department of Health and Human Services - Community Preventive Services Task Force *The Community Guide: Family-Based Interventions for Physical Activity. Rationale and Task Force Finding.* 2017. <https://www.thecommunityguide.org/sites/default/files/assets/PA-Family-based-Interventions.pdf>
28. Marsh, S., Foley, L. S., Wilks, D. C., Maddison, R., *Family-based interventions for reducing sedentary time in youth: a systematic review of randomized controlled trials.* Obes Rev, 2014. **15**(2): p. 117-33.
29. van Sluijs, E., Kriemler, S., McMinn, A. *The effect of community and family interventions on young people's physical activity levels: a review of reviews and updated systematic review.* British journal of sports medicine, 2011. **45**, 914-922 DOI: 10.1136/bjsports-2011-090187. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3736309/>
30. Byrne, L., Ogden, K., Fell, J., Watson, G., Lee, S., Ahuja, K., Bauman, A., *The effects of a community-wide, multi-strategy intervention on physical activity participation in Launceston, Tasmania.* Journal of Science and Medicine in Sport, 2017. **20**: p. e120-e121.
31. Broekhuizen, K., Scholten, A. M., de Vries, S. I. *The value of (pre)school playgrounds for children's physical activity level: a systematic review.* Int J Behav Nutr Phys Act, 2014. **11**, 59 DOI: 10.1186/1479-5868-11-59. <https://www.ncbi.nlm.nih.gov/pubmed/24885611>
32. WHO Regional Office for Europe *Urban green space interventions and health: a review of impacts and effectiveness.* Copenhagen: WHO Regional Office for Europe. 2017. [http://www.euro.who.int/\\_data/assets/pdf\\_file/0010/337690/FULL-REPORT-for-LLP.pdf](http://www.euro.who.int/_data/assets/pdf_file/0010/337690/FULL-REPORT-for-LLP.pdf)
33. McCrorie, P.R., Fenton, C., Ellaway, A. *Combining GPS, GIS, and accelerometry to explore the physical activity and environment relationship in children and young people - a review.* Int J Behav Nutr Phys Act, 2014. **11**, 93 DOI: 10.1186/s12966-014-0093-0. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4172984/>
34. Blake-Lamb, T.L., Locks, L. M., Perkins, M. E., Woo Baidal, J. A., Cheng, E. R., Taveras, E. M. *Interventions for Childhood Obesity in the First 1,000 Days A Systematic Review.* Am J Prev Med, 2016. **50**, 780-9 DOI: 10.1016/j.amepre.2015.11.010. <https://www.ncbi.nlm.nih.gov/pubmed/26916260>
35. Kelley, G.A., Kelley, K. S., *Effects of exercise in the treatment of overweight and obese children and adolescents: a systematic review of meta-analyses.* J Obes, 2013. **2013**: p. 783103.
36. Ruotsalainen, H., Kyngas, H., Tammelin, T., Kaariainen, M. *Systematic review of physical activity and exercise interventions on body mass indices, subsequent physical activity and psychological symptoms in overweight and obese adolescents.* J Adv Nurs, 2015. **71**, 2461-77 DOI: 10.1111/jan.12696. <https://www.ncbi.nlm.nih.gov/pubmed/26031309>
37. US Department of Health and Human Services - Community Preventive Services Task Force *Physical Activity: Built Environment Approaches Combining Transportation System Interventions with Land Use and Environmental Design: Task Force Finding and Rationale Statement Ratified December 2016* 2017. <https://www.thecommunityguide.org/sites/default/files/assets/PA-Built-Environments.pdf>
38. Calise, T.V., et al., *The effect of a neighborhood built environment on physical activity behaviors.* J Phys Act Health, 2012. **9**(8): p. 1089-97.

39. McGrath, L.J., Hopkins, W. G., Hinckson, E. A. *Associations of objectively measured built-environment attributes with youth moderate-vigorous physical activity: a systematic review and meta-analysis*. Sports Med, 2015. **45**, 841-65 DOI: 10.1007/s40279-015-0301-3.
40. US Department of Health and Human Services - Community Preventive Services Task Force *Environmental and Policy Approaches to Increase Physical Activity: Point-of-Decision prompts to encourage use of stairs. Task Force Finding*. 2014.  
<https://www.thecommunityguide.org/sites/default/files/assets/PA-Environmental-PODP.pdf>
41. Jennings, C.A., Yun, L., Loitz, C. C., Lee, E. Y., Mummery, W. K., *A Systematic Review of Interventions to Increase Stair Use*. Am J Prev Med, 2017. **52**(1): p. 106-114.
42. Soler, R.E., Leeks, K. D., Buchanan, L. R., Brownson, R. C., Heath, G. W., Hopkins, D. H., Task Force on Community Preventive Services, *Point-of-decision prompts to increase stair use. A systematic review update*. Am J Prev Med, 2010. **38**(2 Suppl): p. S292-300.
43. Larouche, R., Saunders, T. J., Faulkner, G. E. J., Colley, R. Tremblay, M. *Associations between active school transport and physical activity, body composition, and cardiovascular fitness: A systematic review of 68 studies*. Journal of Physical Activity and Health, 2014. **11**, 206-227 DOI: 10.1123/jpah.2011-0345. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84893130965&doi=10.1123%2fjpah.2011-0345&partnerID=40&md5=9a986b47e3a1e26f84e76d27bffade4a>
44. Martin, A., Boyle, J., Corlett, F., Kelly, P., Reilly, J. J. *Contribution of walking to school to individual and population moderate-vigorous intensity physical activity: Systematic review and meta-analysis*. Pediatric Exercise Science, 2016. **28**, 353-363 DOI: 10.1123/pes.2015-0207.  
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84979669509&doi=10.1123%2fpes.2015-0207&partnerID=40&md5=6cf82225a2a0a08195e92ffb3eed1846>
45. Buck, C., Tkaczick, T., Pitsiladis, Y., De Bourdehaudhuij, I., Reisch, L., Ahrens, W., Pigeot, I. *Objective measures of the built environment and physical activity in children: from walkability to moveability*. J Urban Health, 2015. **92**, 24-38 DOI: 10.1007/s11524-014-9915-2.  
<https://www.ncbi.nlm.nih.gov/pubmed/25380722>
46. McGrath, L.J., Hinckson, E. A., Hopkins, W. G., Mavoa, S., Witten, K., Schofield, G., *Associations Between the Neighborhood Environment and Moderate-to-Vigorous Walking in New Zealand Children: Findings from the URBAN Study*. Sports Med, 2016. **46**(7): p. 1003-17.
47. Denstel, K.D., et al., *Active school transport and weekday physical activity in 9-11-year-old children from 12 countries*. Int J Obes Suppl, 2015. **5**(Suppl 2): p. S100-6.
48. Schoeppe, S., Duncan, M. J., Badland, H., Oliver, M., Curtis, C., *Associations of children's independent mobility and active travel with physical activity, sedentary behaviour and weight status: A systematic review*. Journal of Science and Medicine in Sport, 2013. **16**(4): p. 312-319.
49. Duncan, S., et al., *Active Transport, Physical Activity, and Distance Between Home and School in Children and Adolescents*. J Phys Act Health, 2016. **13**(4): p. 447-53.
50. Lambe, B., Murphy, N., Bauman, A., *Active Travel to Primary Schools in Ireland: An Opportunistic Evaluation of a Natural Experiment*. J Phys Act Health, 2017. **14**(6): p. 448-454.
51. Oreskovic, N.M., Perrin, J. M., Robinson, A. I., Locascio, J. J., Blossom, J., Chen, M. L., Winickoff, J. P., Field, A. E., Green, C., Goodman, E. *Adolescents' use of the built environment for physical activity*. BMC Public Health, 2015. **15**, 251 DOI: 10.1186/s12889-015-1596-6.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4369364/>
52. Keall, M., Chapman, R., Howden-Chapman, P., Witten, K., Abrahamse, W., Woodward, A., *Increasing active travel: results of a quasi-experimental study of an intervention to encourage walking and cycling*. J Epidemiol Community Health, 2015. **69**(12): p. 1184-90.
53. Robinson, M.N., Tansil, K. A., Elder, R. W., Soler, R. E., Labre, M. P., Mercer, S. L., Eroglu, D., Baur, C., Lyon-Daniel, K., Fridinger, F., Sokler, L. A., Green, L. W., Miller, T., Dearing, J. W., Evans, W. D., Snyder, L. B., Kasisomayajula Viswanath, K., Beistle, D. M., Chervin, D. D., Bernhardt, J. M., Rimer, B. K. *Mass media health communication campaigns combined with health-related product distribution: a community guide systematic review*. Community Preventive Services Task, Force. Am J Prev Med, 2014. **47**, 360-71 DOI: 10.1016/j.amepre.2014.05.034. <https://www.ncbi.nlm.nih.gov/pubmed/25145620>
54. US Department of Health and Human Services - Community Preventive Services Task Force *Health Communication and Social Marketing: Health Communication Campaigns That Include Mass Media and Health-Related Product Distribution: Task Force Finding and Rational Statement*. 2011.  
<https://www.thecommunityguide.org/sites/default/files/assets/Health-Communication-Mass-Media.pdf>
55. Wakefield, M.A., Loken, B., Hornik, R. C., *Use of mass media campaigns to change health behaviour*. Lancet, 2010. **376**(9748): p. 1261-71.
56. Bauman, A., Bellew, B. *A review of evaluation and market research into mass media and social marketing campaigns focussed on healthy eating, physical activity and healthy weight*. Heart Foundation (Western Australia). 2011.  
<https://livelighter.com.au/Assets/resource/researchevidence/Social-Marketing-Review-Bauman-Bellew-Heart-Foundation-WA.pdf>

57. Leavy, J.E., Bull, F. C., Rosenberg, M., Bauman, A. *Physical activity mass media campaigns and their evaluation: a systematic review of the literature 2003-2010*. Health Educ Res, 2011. **26**, 1060-85 DOI: 10.1093/her/cyr069. <https://www.ncbi.nlm.nih.gov/pubmed/21900408>
58. Huhman, M.E., Potter, L. D., Duke, J. C., Judkins, D. R., Heitzler, C. D., Wong, F. L. *Evaluation of a national physical activity intervention for children: VERB campaign, 2002-2004*. Am J Prev Med, 2007. **32**, 38-43 DOI: 10.1016/j.amepre.2006.08.030.
59. Berkowitz, J.M., Huhman, M., Nolin, M. J., *Did augmenting the VERB campaign advertising in select communities have an effect on awareness, attitudes, and physical activity?* Am J Prev Med, 2008. **34**(6 Suppl): p. S257-66.
60. Bellew, B., Young, S. Voucher schemes to promote increased participation in Sport and Active Recreation: Rapid Evidence Review for the NSW Office of Sport. SPRINTER Group. The University of Sydney. *Voucher schemes to promote increased participation in Sport and Active Recreation*. 2017.
61. Pavlik, M., de Vries, M. *The Voucher System as an Alternative for Allocating Sports Grants*. Central European Journal of Public Policy, 2014. **8**. <http://cejpp.eu/index.php/ojs/article/view/167/127>
62. Smith, B.J., Thomas, M., Batras, D. *Overcoming disparities in organized physical activity: findings from Australian community strategies*. Health Promot Int, 2016. **31**, 572-81 DOI: 10.1093/heapro/dav042. <https://www.ncbi.nlm.nih.gov/pubmed/26048868>
63. White, M.I., et al., *Physical activity and exercise interventions in the workplace impacting work outcomes: A stakeholder-centered best evidence synthesis of systematic reviews*. International Journal of Occupational and Environmental Medicine, 2016. **7**(2): p. 61-74.
64. Reed, J.L., et al., *Impact of Workplace Physical Activity Interventions on Physical Activity and Cardiometabolic Health Among Working-Age Women: A Systematic Review and Meta-Analysis*. Circ Cardiovasc Qual Outcomes, 2017. **10**(2).
65. Moreira-Silva, I., et al., *The effects of workplace physical activity programs on musculoskeletal pain: A systematic review and meta-analysis*. Workplace Health and Safety, 2016. **64**(5): p. 210-222.
66. Brinkley, A., McDermott, H., Munir, F., *What benefits does team sport hold for the workplace? A systematic review*. J Sports Sci, 2017. **35**(2): p. 136-148.
67. Feltner, C., Peterson, K., Palmieri Weber, R., Cluff, L., Coker-Schwimmer, E., Viswanathan, M., Lohr, K. N. *The Effectiveness of Total Worker Health Interventions: A Systematic Review for a National Institutes of Health Pathways to Prevention Workshop*. Ann Intern Med, 2016. **165**, 262-9 DOI: 10.7326/M16-0626. <https://www.ncbi.nlm.nih.gov/pubmed/27240022>
68. Plotnikoff, R.C., Costigan, S. A., Williams, R. L., Hutchesson, M. J., Kennedy, S. G., Robards, S. L., Allen, J., Collins, C. E., Callister, R., Germov, J. *Effectiveness of interventions targeting physical activity, nutrition and healthy weight for university and college students: a systematic review and meta-analysis*. Int J Behav Nutr Phys Act, 2015. **12**, 45 DOI: 10.1186/s12966-015-0203-7. <https://www.ncbi.nlm.nih.gov/pubmed/25890337>
69. Khan, K.M., Thompson, A. M., Blair, S. N., Sallis, J. F., Powell, K. E., Bull, F. C., Bauman, A. E., *Sport and exercise as contributors to the health of nations*. Lancet, 2012. **380**(9836): p. 59-64.
70. Marlier, M., Van Dyck, D., Cardon, G., De Bourdeaudhuij, I., Babiak, K., Willem, A., *Interrelation of Sport Participation, Physical Activity, Social Capital and Mental Health in Disadvantaged Communities: A SEM-Analysis*. PLoS One, 2015. **10**(10): p. e0140196.
71. Caddick, N., Smith, B., *The impact of sport and physical activity on the well-being of combat veterans: A systematic review*. Psychology of Sport and Exercise, 2014. **15**(1): p. 9-18.
72. Guo, Y., Shi, H., Yu, D., Qiu, P., *Health benefits of traditional Chinese sports and physical activity for older adults: A systematic review of evidence*. Journal of Sport and Health Science, 2016. **5**(3): p. 270-280.
73. Bock, C., Jarczok, M. N., Litaker, D. *Community-based efforts to promote physical activity: a systematic review of interventions considering mode of delivery, study quality and population subgroups*. J Sci Med Sport, 2014. **17**, 276-82 DOI: 10.1016/j.jsams.2013.04.009. <https://www.ncbi.nlm.nih.gov/pubmed/23693030>
74. US Department of Health and Human Services - Community Preventive Services Task Force *Campaigns and Informational Approaches to Increase Physical Activity: Community-wide campaigns. Task Force Finding*. 2014. <https://www.thecommunityguide.org/sites/default/files/assets/PA-Campaigns-Communitywide.pdf>
75. US Department of Health and Human Services - Community Preventive Services Task Force *Behavioral and Social Approaches to Increase Physical Activity: Social Support Interventions in Community Settings*. 2014. <https://www.thecommunityguide.org/sites/default/files/assets/PA-Behavioral-Community-Support.pdf>
76. Chase, J.D., Phillips, L. J., Brown, M., *Physical Activity Intervention Effects on Physical Function Among Community-Dwelling Older Adults: A Systematic Review and Meta-Analysis*. J Aging Phys Act, 2017. **25**(1): p. 149-170.

77. Akanni, O.O., Smith, M. L., Ory, M. G. *Cost-Effectiveness of a Community Exercise and Nutrition Program for Older Adults: Texercise Select*. Int J Environ Res Public Health, 2017. **14**, DOI: 10.3390/ijerph14050545. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5451995/>
78. Bakker, E.A., et al. *Association of Resistance Exercise, Independent of and Combined With Aerobic Exercise, With the Incidence of Metabolic Syndrome*. Mayo Clinic Proceedings, 2017. DOI: 10.1016/j.mayocp.2017.02.018. [http://www.mayoclinicproceedings.org/article/S0025-6196\(17\)30167-2/fulltext](http://www.mayoclinicproceedings.org/article/S0025-6196(17)30167-2/fulltext)
79. Olanrewaju, O., Kelly, S., Cowan, A., Brayne, C., Lafortune, L., *Physical activity in community dwelling older people: A systematic review of reviews of interventions and context*. PLoS ONE, 2016. **11**(12).
80. Garrett, S., Elley, C. R., Rose, S. B., O'Dea, D., Lawton, B. A., Dowell, A. C., *Are physical activity interventions in primary care and the community cost-effective? A systematic review of the evidence*. Br J Gen Pract, 2011. **61**(584): p. e125-33.
81. Gc, V., Wilson, E. C., Suhrcke, M., Hardeman, W., Sutton, S., *Are brief interventions to increase physical activity cost-effective? A systematic review*. Br J Sports Med, 2016. **50**(7): p. 408-17.
82. Balk, E.M., et al., *Combined Diet and Physical Activity Promotion Programs to Prevent Type 2 Diabetes Among Persons at Increased Risk: A Systematic Review for the Community Preventive Services Task Force*. Ann Intern Med, 2015. **163**(6): p. 437-51.
83. Li, R., et al., *Economic Evaluation of Combined Diet and Physical Activity Promotion Programs to Prevent Type 2 Diabetes Among Persons at Increased Risk: A Systematic Review for the Community Preventive Services Task Force*. Ann Intern Med, 2015. **163**(6): p. 452-60.
84. Pronk, N.P., P.L. Remington, and F. Community Preventive Services Task, *Combined Diet and Physical Activity Promotion Programs for Prevention of Diabetes: Community Preventive Services Task Force Recommendation Statement*. Ann Intern Med, 2015. **163**(6): p. 465-8.
85. Force, U.S.P.S.T., et al. *Behavioral Counseling to Promote a Healthful Diet and Physical Activity for Cardiovascular Disease Prevention in Adults Without Cardiovascular Risk Factors: US Preventive Services Task Force Recommendation Statement*. JAMA, 2017. **318**, 167-174 DOI: 10.1001/jama.2017.7171. <https://www.ncbi.nlm.nih.gov/pubmed/28697260>
86. Patnode, C.D., Evans, C. V., Senger, C. A., Redmond, N., Lin, J. S. *Behavioral Counseling to Promote a Healthful Diet and Physical Activity for Cardiovascular Disease Prevention in Adults Without Known Cardiovascular Disease Risk Factors: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force*. JAMA, 2017. **318**, 175-193 DOI: 10.1001/jama.2017.3303. <https://www.ncbi.nlm.nih.gov/pubmed/28697259>
87. Campbell, F., Holmes, M., Everson-Hock, E., Davis, S., Buckley Woods, H., Anokye, N., Tappenden, P., Kaltenthaler, E., *A systematic review and economic evaluation of exercise referral schemes in primary care: a short report*. Health Technol Assess, 2015. **19**(60): p. 1-110.
88. Orrow, G., Kinmonth, A. L., Sanderson, S., Sutton, S., *Effectiveness of physical activity promotion based in primary care: Systematic review and meta-analysis of randomised controlled trials*. BMJ (Online), 2012. **344**(7850): p. 16.
89. Lamming, L., et al., *What do we know about brief interventions for physical activity that could be delivered in primary care consultations? A systematic review of reviews*. Preventive Medicine, 2017. **99**: p. 152-163.
90. Gagliardi, A.R., Abdallah, F., Faulkner, G., Ciliska, D., Hicks, A., *Factors contributing to the effectiveness of physical activity counselling in primary care: A realist systematic review*. Patient Education and Counseling, 2015. **98**(4): p. 412-419.
91. Richards, E.A. and Y. Cai, *Integrative Review of Nurse-Delivered Physical Activity Interventions in Primary Care*. West J Nurs Res, 2016. **38**(4): p. 484-507.
92. Harris, T., Kerry, S. M., Limb, E. S., Victor, C. R., Iliffe, S., Ussher, M., Whincup, P. H., Ekelund, U., Fox-Rushby, J., Furness, C., Anokye, N., Ibison, J., DeWilde, S., David, L., Howard, E., Dale, R., Smith, J., Cook, D. G., *Effect of a Primary Care Walking Intervention with and without Nurse Support on Physical Activity Levels in 45- to 75-Year-Olds: The Pedometer And Consultation Evaluation (PACE-UP) Cluster Randomised Clinical Trial*. PLoS Med, 2017. **14**(1): p. e1002210.
93. Samdal, G.B., Eide, G. E., Barth, T., Williams, G., Meland, E. *Effective behaviour change techniques for physical activity and healthy eating in overweight and obese adults; systematic review and meta-regression analyses*. International Journal of Behavioral Nutrition and Physical Activity, 2017. **14**, DOI: 10.1186/s12966-017-0494-y. <http://ijbnpa.biomedcentral.com/track/pdf/10.1186/s12966-017-0494-y?site=ijbnpa.biomedcentral.com>
94. Blondell, S.J., R. Hammersley-Mather, and J.L. Veerman, *Does physical activity prevent cognitive decline and dementia?: A systematic review and meta-analysis of longitudinal studies*. BMC Public Health, 2014. **14**(1).
95. Wanner, M., et al., *Active transport, physical activity, and body weight in adults: a systematic review*. Am J Prev Med, 2012. **42**(5): p. 493-502.

96. Yun, L., Ori, E. M., Lee, Y., Sivak, A., Berry, T. R. *A Systematic Review of Community-wide Media Physical Activity Campaigns: an Update from 2010*. J Phys Act Health, 2017. 1-44 DOI: 10.1123/jpah.2016-0616. <https://www.ncbi.nlm.nih.gov/pubmed/28290762>
97. Swartz, M.C., Lewis, Z. H., Lyons, E. J., Jennings, K., Middleton, A., Deer, R. R., Arnold, D., Dresser, K., Ottenbacher, K. J., Goodwin, J. S., *Effect of Home- and Community-Based Physical Activity Interventions on Physical Function Among Cancer Survivors: A Systematic Review and Meta-Analysis*. Arch Phys Med Rehabil, 2017.
98. Cohen, D., Han, B., Derose, K. P., Williamson, S., Paley, A., Batteate, C. *CicLAvia: Evaluation of participation, physical activity and cost of an open streets event in Los Angeles*. Prev Med, 2016. **90**, 26-33 DOI: 10.1016/j.ypmed.2016.06.009. <https://www.ncbi.nlm.nih.gov/pubmed/27317978>
99. Sarmiento, O.L., Diaz Del Castillo, A., Triana, C. A., Acevedo, M. J., Gonzalez, S. A., Pratt, M., *Reclaiming the streets for people: Insights from Ciclovias Recreativas in Latin America*. Prev Med, 2016.
100. Shu, S., Batteate, C., Cole, B., Froines, J., Zhu, Y., *Air quality impacts of a CicLAvia event in Downtown Los Angeles, CA*. Environ Pollut, 2016. **208**(Pt A): p. 170-6.
101. Shu, S., Batteate, C., Cole, B., Froines, J., Zhu, Y. *Air quality impacts of a CicLAvia event in Downtown Los Angeles, CA*. Environ Pollut, 2016. **208**, 170-6 DOI: 10.1016/j.envpol.2015.09.010. <https://www.ncbi.nlm.nih.gov/pubmed/26493865>

## Appendix B Background Information on the Consultation Process

A [consultation process](#) to help develop a National Sports Plan open until 31 July 2017.

The Australian Government makes a significant contribution to Australian sport, with over \$357 million being invested to support sport and recreation activities and facilities in 2016-17. It is important this level of investment not only achieves value, but accurately reflects the value our society places upon sport. Through a National Sports Plan the Government seeks to understand Australia's expectations of the sports sector, including our shared goals for high performance sport; sporting participation; cultural and public health outcomes and our willingness to pay for these services, opportunity and success.

A backgrounder/ fact sheet on the National Sports Plan is provided on the ASC website at [THIS LINK](#)

Submissions are made by completing an online questionnaire.

This plan is expected to be framed around four key, interrelated pillars of (i) participation, (ii) performance, (iii) preventive health through physical activity, and (iv) integrity.

### Consultation Questions

#### Participation

1. How should sporting organisations evolve the way their games are played or the products/variations they offer to ensure we get and keep more Australians active?
2. How do we make sport and physical activity part of everyone's daily routine?
3. How can sports better reach under-represented groups?
4. What is the role of non-traditional sport providers in helping to increase participation in sport?
5. How do we increase sport participation in the schooling years to maximise physical literacy and establish good habits for life?

#### Prevention through physical activity

6. How do we ensure that the key benefits of sport and physical activity such as physical and mental health, personal wellbeing and community cohesion are promoted by governments and the community?
7. How should we raise awareness of the benefits of sport to the Australian public?
8. How do we use the reach and influence of sport to get more people active – especially people with sedentary lifestyles?
9. How do we ensure sport delivery bodies (e.g. Australian Sports Commission, State Departments of Sport and Recreation, National Sporting Organisations etc.) and health promotion organisations work together as effectively as possible to improve population health?

#### Performance

10. Should we be focusing on investment for maximum medal tally success or spreading our spend in support of more high performance athletes in a broader range of sports?
11. How can the AIS and state-based institutes of sport better support high performance athletes?

#### Integrity

12. What are the best arrangements for the Australian Government's sports integrity capability to ensure Australian sport is effectively protected against integrity threats.

#### Major Sporting Events

13. Should governments financially support major sporting events to ensure their viability and delivery and provide opportunities to Australian sports and athletes?
14. How do we maximise the value of investment in major domestic and international sporting events?
15. How should governments prioritise investment in major sporting events?
16. Should governments invest funding to attract major international sporting events to Australia?

#### Governance

17. What should be the respective roles for national, state/territory and community sporting organisations to grow Australian sport?
18. How can sporting organisations (national, state/territory, community) better play a role in getting more Australians active?

#### Sporting Infrastructure

19. How can we better develop, utilise and maintain sporting infrastructure to support major events and participation growth?

#### Sources of funding, including a national good causes lottery

20. Given governments have limited budgets how should they allocate funding across high performance and community sport?
21. Do you support the introduction of a national good causes lottery to increase the funding available for Australian athletes and to increase participation in sport?
22. What other forms of non-government revenue could be used to help Australian athletes and increase participation in sport?