Exercise & Sports Science Australia Submission: global action plan to promote physical activity

“Australia needs to expand its allied health workforce and improve access to services that provide physical activity, weight loss and healthy nutritional advice and support.”

(National Preventative Health Task Force, 2014)

Alex Lawrence
Policy and Advocacy Officer
Exercise & Sports Science Australia

Anita Hobson-Powell
Chief Executive Officer
Exercise & Sports Science Australia
22nd September, 2017

Thank you for the opportunity to submit feedback to help inform the Global action plan to promote physical activity. Exercise & Sports Science Australia (ESSA) is a professional association representing over 7,000 exercise and sports science professionals.

Despite low levels of physical activity being a major risk factor for ill-health, approximately 50% of Australians’ are insufficiently active. With 32% of Australia’s total burden of disease attributed to modifiable risk factors, ESSA maintains a strong commitment to inspiring all Australians to be healthier and more active. We advocate for increased access to physical activity opportunities for every Australian; improved fairness in the equitable distribution of health services no matter an individual’s background; and quality in the delivery of health service.

ESSA welcomes the opportunity to provide ongoing input into the UN’s Global Action Plan to promote physical activity. As a leading organisation promoting the benefits of physical activity, with a membership of over 7,000 exercise and sports science professionals, ESSA is keen to engage with the UN to help ensure the successful and sustainable uptake and implementation of key recommendations globally. Please do not hesitate to contact alex.lawrence@essa.org.au for further information.

1. Exercise and sports science in Australia
ESSA is a professional organisation which is committed to establishing, promoting and defending the career paths of tertiary trained exercise and sports science professionals. ESSA is the peak professional body and accreditng authority for accredited exercise physiologists, accredited exercise scientists, accredited sports scientists and accredited high performance managers.

1.2 Accredited exercise physiologist
Accredited exercise physiologists (AEP) specialise in clinical exercise prescription for the management of chronic conditions.

AEPs are allied health professionals with the highest level of training for prescribing exercise to individuals. AEPs hold, at a minimum, a 4-year bachelor degree that meets the Australian Qualification Framework (AQF) Level 7 requirements. This equips AEPs with the knowledge, skills and competencies to design, deliver and evaluate safe and effective exercise interventions for people who have acute, sub-acute or chronic medical conditions, injuries and disabilities. These interventions include health and physical activity education, advice and support, and lifestyle modification with a strong focus on achieving behavioural change.

1.3 Accredited exercise scientist
Accredited exercise scientists (AES) specialise in exercise prescription for health, fitness, wellbeing, performance and prevention of chronic conditions.
AES are professionals with high level training in exercise and sports science. At a minimum, they hold a bachelor degree that meets the Australian Qualification Framework (AQF) Level 7 requirements. The aim of AES interventions is to educate, promote and implement the adoption of physical activity and/or exercise. These programs can be at an individual, community or population level.

1.4 Accredited sports scientist
Accredited sports scientists (ASpS) specialise in athlete and team specific exercise services (e.g. testing, prescription, analysis, injury management) to support and enhance performance.

ASpS are highly trained professionals who provide sports science services and conduct research relating to sport in an elite environment such as the Australian Institute of Sport, state academy or professional sports clubs. They help individual athletes and teams to improve their sporting performance using scientific knowledge, methods and applications in the areas of physiology, biomechanics, psychology, and motor control and motor development. They evaluate research, and they advise on the technical and practical aspects of training, injury prevention, technique, nutritional supplements, performance and recovery practices. ASpS work at all levels of sport, including with able-bodied and para-athletes.

1.5 Accredited high performance manager
Accredited high-performance managers (AHPM) specialise in leading high performance programs of a sporting team, organisation or club. At all times, an AHPM makes the wellbeing of the athlete, the team and other service users their primary concern by providing the utmost duty of care and never recommending the use of any substance or practice that might knowingly cause harm to the service user.

2. Access to physical activity in the Australian context
Compared to other OECD countries (Organisation for Economic Co-operation and Development), Australia is progressive in its approach to facilitating access to physical activity and exercise services. Several systems exist that financially assist Australians living with, or at risk of developing a chronic disease, in accessing exercise professionals, such as AEPs.

Recognising AEPs within the Australian healthcare system has both improved health outcomes (section 2.1) and helped promote exercise and physical activity as a normal part of care (section 2.2) for people living with a chronic illness.

2.1 Health and financial outcomes of improving access to exercise professionals
Regular exercise, as prescribed by an AEP, is an evidence-based therapy for the management or treatment of many chronic diseases\(^1\). Due to the complexity of chronic disease, successful interventions require consideration of the gamut of social, psychological and environmental influences that lead to the pathogenesis of disease\(^2\).
Evidence suggests that services provided by AEPs are likely more effective than non-university qualified professionals or unsupervised exercise alone, partly attributed to an AEP’s ability to account for the potential risks and likelihood of the presence of comorbidities in populations with chronic disease[3].

In 2016, ESSA commissioned Deloitte Access Economics to identify the financial investment associated with engaging the AEP workforce from the perspective on the consumer[3]. Deloitte Access Economics identified that exercise interventions delivered by AEPs are **efficacious and highly cost effective for Australians living with complex chronic disease**[3]. The net benefit per person per year include:

- $2,820 for people living with type 2 diabetes
- $5,467 for people living with depression
- $7,606 for people living with cardiovascular disease
- $6,629 for people living with chronic obstructive pulmonary disease
- $241 for people living with asthma[3].

For consumers receiving AEP exercise interventions, on average the overall financial benefit is estimated to be $6,562 per year, with a net benefit of $5,938 (overall benefit minus the cost of treatment), and a benefit to cost ratio of 10.5 (that is a $10.5 return for every AUD spent the consumer spends on exercise treatment) and approximately 25% of direct out-of-pocket expenses saved[3].

In addition to consumer savings, improving access to AEPs has significant implications for the Australian economy. A summary of the benefits and costs of AEP interventions per person, for the conditions analysed by Deloitte are outlined in the table below.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Benefits ($)</th>
<th>Costs ($) (E)</th>
<th>BCR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health system (A)</td>
<td>Productivity &amp; other financial (B)</td>
<td>BoD (C)</td>
</tr>
<tr>
<td>Pre-diabetes</td>
<td>1,977</td>
<td>1,520</td>
<td>2,617</td>
</tr>
<tr>
<td>Type 2 diabetes</td>
<td>5,107</td>
<td>NE</td>
<td>2,860</td>
</tr>
<tr>
<td>Mental health (depression)</td>
<td>330</td>
<td>1,909</td>
<td>NE</td>
</tr>
<tr>
<td>Chronic disease (cardiovascular)</td>
<td>NE</td>
<td>NE</td>
<td>11,847</td>
</tr>
</tbody>
</table>

Note: BoD is ‘burden of disease’, NE is ‘not estimated due to lack of available data’, ^ BCRs (Benefit to Cost Ratio) for pre-diabetes, type 2 diabetes and mental health (depression) are reported as the ratio of financial benefits (health system and lost productivity savings) to costs. The BCR for chronic disease is relative to the burden of disease. BCRs which contain NE elements are reported on a ‘greater than or equal to’ basis, as it is assumed that the NE components would add to the benefits. Source: Deloitte Access Economics (2015).
2.2 Exercise and physical activity as a normal part of care

While physical activity and exercise is still not routinely prescribed in primary care. For example, over 85% of the population visits a General Practitioner (GP) at least once a year; however, only 18% of patients received physical activity advice[4]. Formally recognising AEPs within the Australian Healthcare system has gone some way to addressing this issue:

- In 2006, AEPs were recognised by Medicare Australia as an allied health provider under the Enhanced Primary Care Program—now Chronic Disease Management Program (CDM). Medicare facilitates access to exercise and behaviour change services two ways: 5 individual exercise physiology services for individual living with a chronic disease (Item numbers 10950-10970); and 8 group services for individuals living with type 2 diabetes (MBS items 81100 to 81125). AEPs have since become the fifth most utilised allied health professional, a testimony to the recognition of the effectiveness of AEP interventions as a cornerstone of the allied health sector.
- Following the recognition under Medicare, AEPs were introduced as an allied health professional by the Department of Veterans’ Affairs; granting eligible veterans access to exercise physiology services.
- In 2007, the Department of Health and Ageing released the Quality Assurance Requirements for Privately Insured Services. The framework identified that “the exercise physiology industry meets all of the requirements of an allied health profession that is eligible for the provision of health insurance benefits”. Since then AEP services are recognised by the majority of private health insurance funds as an ancillary benefit.
- Recognition of AEPs in the Royal Australian College of General Practitioners (RACGP) smoking, nutrition, alcohol and physical activity (SNAP) and General practice management of type 2 diabetes guidelines.

3. ESSA’s achievements and endeavours

ESSA’s mission is to lead and promote excellence in exercise and sports science for the benefits of society and the professions. We aim to achieve several major goals by 2020; goals that align closely with key actions proposed in the action plan. ESSA’s goals include:

- Clinical exercise interventions by an accredited exercise physiologist will be included as part of standard care for all people with complex and chronic medical conditions or injuries.
- Accredited exercise scientists will be the preferred minimum qualification for exercise prescription and delivery for healthy people and those at increased risk of developing chronic disease.
- Australians will understand and value the benefits of exercise prescribed by an appropriately accredited exercise professional.
ESSA has effected a broad and inclusive strategy to achieve the 2020 strategic objectives. Some examples of public, physical activity promoting projects include:

As exercise experts, Exercise & Sports Science Australia, has developed Exercise Right to better educate the public by cutting through the misinformation currently found online about exercise and health. It is a brand backed by science, research, knowledge and experience.

Exercise Right’s key aim is to inform and inspire all Australians to be healthier and more active. Currently, Exercise Right has:
- Over 100,000 unique website views annually
- 13,500 social media followers
- Over 5,000 subscribers.

Exercise is Medicine® Australia (EIM) is a global initiative, managed in Australia, by ESSA. EIM is focused on encouraging primary healthcare providers to treat physical activity as a vital sign by reviewing and assessing every patient’s physical activity levels at every visit. Patients should be counselled on physical activity, and provided with an exercise prescription or referral to an accredited exercise physiologist, accredited exercise scientist or appropriately qualified allied health professional.

EIM workshops empower GPs and nurses with the knowledge and skills to integrate physical activity and exercise into part of standard chronic disease prevention and management, with the potential to reach large groups of the community, increase community physical activity levels and reduce healthcare costs.

EIM also provides resources to support general practice to assess, and counsel patients on physical activity, as well as, support material to help refer patients on to appropriately qualified exercise professionals.

**ESSA for an Active Nation**
The current focus on episodic acute health care is ill-suited to facilitate best-practice chronic disease management. As a result of talking to key stakeholders, monitoring changes in health policy and the healthcare environment at large, ESSA has identified and designed a targeted advocacy strategy around an overarching campaign: *ESSA for an active nation*. ESSA is calling for increased **access** to physical activity opportunities for every Australian; improved **fairness** in the equitable distribution of health services no matter an individual’s background; and **quality** in the delivery of health service across 12 key strategic areas (imperatives).
ESSA’s 12 strategic imperatives:

1. Increased engagement of AEPs in hospital settings
2. Reduce avoidable hospital admissions and readmissions
3. Redirect focus on promotion and prevention
4. Optimize chronic disease management services
5. Enhance inter-professional collaboration and interaction within the primary healthcare sector
6. Create robust sports science workforce
7. Support supplementation of national diabetes strategy
8. Better integration and coordination of Medicare service
9. Optimize aged-care services
10. Contribute to the disability services
11. Contribute to the delivery of mental health care services
12. Support a productive Australian workforce

References:

**BENEFIT TO COST RATIO OF AEP INTERVENTIONS**

- Pre-diabetes: 6.0
- Type 2 Diabetes: 8.8
- Mental Illness (Depression): 2.7
- Chronic Heart Failure: 6.2
- Chronic Back Pain: 14.6
- Osteoarthritis: 4.0
- Rheumatic Diseases: 4.2

**COMBINING THE DIRECT COSTS**

With the burden of disease avoided annually, the total annual wellbeing gains due to an AEP intervention is:

- $7,967 per person annually for type 2 diabetes
- $6,115 per person annually for pre-diabetes

**EXERCISE INTERVENTIONS FOR PEOPLE WITH A MENTAL HEALTH CONDITION, AS DELIVERED BY AEPs, RESULT IN BENEFITS OF**

$2,239 per person.

The total annual lifetime burden of disease savings resulting from exercise interventions in people with CHF, as delivered by AEPs, are estimated to be

$11,847 per person.

**ANNUAL SAVING IN HEALTH SYSTEM EXPENDITURE FROM AN AEP DELIVERED EXERCISE INTERVENTION:**

- $5,107 per person annually for type 2 diabetes
- $1,977 per person annually for pre-diabetes

$477 per person per year is the cost savings due to a reduction in complications of diabetes.