

Exercise for good health and a strong economy

Exercise & Sports Science Australia (ESSA) is calling on candidates for the 2024 Queensland (QLD) Election to support five policy priorities that ensure Queenslanders can access exercise and sports science services to support better health outcomes and a strong economy.



Increase access to Exercise Physiology for people with mental illness



Expand access to exercise interventions **for people with diabetes**



Expand access to exercise interventions for people with cancer



Invest in physical activity in schools



Mandate accreditation for sports scientists working in sports programs

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Why these priorities are important

Physical inactivity in Australia contributes to 2.5% of the total burden of disease on our healthcare system, according to the Australian Institute of Health and Welfare. This translates to more than 122,000 people impacted by serious health concerns and more than 8,250 preventable deaths each year [1].

Additionally, physical inactivity and the consequential health impacts cause an annual productivity loss of up to \$15.6 billion, and leaves Aussies out of pocket with up to \$850 million spent on annual healthcare costs [2].

As the population grows throughout urban, rural, and regional areas, better access to physical activity and exercise interventions delivered by Accredited Exercise Professionals is needed to reduce the risks of disease.

Research consistently shows that access to high-quality clinical and cost-effective physical activity and exercise interventions significantly improves the health and economic outcomes of individuals and communities [3, 4] long-term illness, avoidable hospital admissions and premature death [5, 6].

In Queensland, the most recent data available from the Department of Health reveal that only 56.6% of Queensland adults engaged in a sufficient amount of physical activity [7].

This rate was less for Queenslanders living in socioeconomically disadvantaged areas (47%), and higher for those living in the most socioeconomically advantaged areas (63.8%). When strength and resistance exercises were included, only 15.6% of adult Queenslanders met the physical activity guidelines, which was lower than the national average of 17.3% [7].

While physical activity and exercise is commonly advised by healthcare professionals, evidence shows that simply telling people to exercise does not translate into action. What's needed is an intervention that requires accountability. Engagement in clinical, individually tailored approach delivered by Accredited Exercise Physiologists and Accredited Exercise Scientists achieves better outcomes [8].

Accredited Exercise Physiologists (AEP) and Accredited Exercise Scientists (AES) deliver models of early intervention and preventive care, which focus on person centred behavioural change, wellness and reablement that lead to better physical and mental health, as well as wider social and economic outcomes [4].

Additionally, Accredited Sports Scientists (ASpS) adhere to high standards that ensure integrity in the delivery of sports programs to support health and human performance.

What's needed to address Queensland's health and sport concerns is better investment in the exercise physiology, exercise science and sports science workforce.

This investment supports the implementation of the Queensland Workforce Strategy 2032 priorities. The strategy highlights the need to address several public health issues, including the rising demand for mental health and diabetes services, illnesses associated with an aging population, and the prevalence of chronic disease [9].

Currently, Queensland Health employs 46 AEPs to serve a population of 5.5 million, amounting to 0.8 AEPS per 100,000 Queenslanders.

In comparison, Victoria's public health system employ 174 AEPs in 2023 to serve its population of 6.8 million, with 2.56 AEPS per 100,000 Victorians.

Queensland employs 46 AEPs for a population of 5.5 million, while Victoria employs 174 AEPs for a population of 6.8 million. The coverage is 2.56 AEPs per 100,000 Victorians compared to 0.8 AEPs per 100,000 Queenslanders.

Queensland must prioritise physical activity and exercise interventions to align with its health and economic interests.

Investing in ESSA's five policy priorities as outlined in this document will ensure the incoming Queensland government can deliver self-sustaining physical and mental health outcomes for individuals and communities, and foster a more resilient, active, and productive workforce.



Increase access to Exercise Physiology for people with mental illness

Mental illness affects one in five Queenslanders every year with 50% of people expected to experience a mental health illness during their lifetime [6].

This is cause for concern as people with mental disorders have a mortality rate 2.2 times more than the general population [10]. and a life expectancy shortened by 10-36 years [11]. Research shows that the gap in life expectancy was almost 80% attributable to physical health comorbidities, such as cardiovascular disease, respiratory disease, and certain cancers [12].

Utilising Accredited Exercise Physiologists to deliver physical activity and exercise interventions would greatly increase life quality and expectancy, and decrease incidences of chronic conditions and the side effects associated with psychotropic medication, particularly in the early intervention stages of illness [13, 14].

The Queensland government has already recognised this need, by committing \$1.64 billion to improve mental health services through the <u>Better Care Together</u> initiative. Further, the state has current policies and recommendations that support increasing access to physical activity and exercise interventions for people with mental health conditions [15]. One example is the Queensland Mental Health Commission report <u>'Shifting Minds'</u> [16] which recommends expanding community based services for people with mental illness and the report specifically mentions small group exercise.

In 2022, the Queensland Mental Health Select Committee through the Parliamentary Inquiry into the opportunities to improve mental health outcomes for Queenslanders acknowledged [17]:

"... research suggests that people experiencing mental ill-health are more likely to develop a physical illness due to factors including stigma, lack of health service integration, and a lack of clarity about who is responsible for physical health monitoring in people living with a mental illness."

In response to this assessment, the committee focused on the treatment of mental and physical health comorbidities in recommendation 51 which states [17]:

'The committee recommends that Queensland Government integrates dietitians and exercise physiologists within the mental health workforce to provide more holistic care to people experiencing mental and physical health comorbidities.'

Only six of the 40 adult mental health services across Queensland offer access to services from an exercise physiologist. Based on scientific evidence, plus the recommendations from QLD Government policy and the Parliamentary Inquiry into mental health, it is incumbent on the QLD Government to increase access to exercise physiology for people with mental health conditions.

ESSA'S CALL TO ACTION

ESSA is calling on the incoming Queensland government to spend a portion of the \$1.64 billion allocated to mental health to employ exercise physiologists in adult mental health services in the following Hospital and Health Services:

New Positions	Locations
4 x Level 2	Level 2 - Cairns, Townsville, Mackay, Gold CoastCoast
5 x Level 3	Level 3 - Gold Coast, Townsville, Metro North, West Moreton, Metro South
3 x Level 4	Level 4 - Metro North, Metro South, Gold Coast

Estimated Investment Required: \$1,000,000 approx. per annum (calculated at mid-point) [18]



Expand access to exercise interventions for people with diabetes

The prevalence of diabetes in Australia has increased over the last twenty years, from 3.3% in 2001 to 5.3% in 2022. Like other chronic conditions, diabetes prevalence increases with age and the likelihood of developing diabetes increases even more for people in areas of most disadvantage (8.6% compared to 3.1%) and for those living with disability (10.8% compared to 2.8%) [19].

The proportion of people diagnosed with diabetes in Queensland remains consistent with the national prevalence, with 1 in 20 Queenslanders currently diagnosed [20]. However, Queensland is particularly at risk of experiencing higher diagnosis rates in the future due to limited access to infrastructure [21], a limited healthcare workforce, geographical barriers, unique community profiles, low physical activity levels and childhood obesity.

Exercise is an essential component of effective diabetes and pre-diabetes treatment, as it helps to control blood sugar levels, reduce the risk of complications, and enhance overall well-being [22].

In November 2021, the Queensland Minister for Health and Ambulance Service asked the Queensland Statewide Diabetes Clinical Network to consider the inclusion of Accredited Exercise Physiologists in diabetes multi-disciplinary teams (MDT) [22]. In December 2021, the Queensland Statewide Diabetes Clinical Network responded to advise that [23]:

'The Steering Committee provided principal support in recognition that the role of exercise physiology is a valuable aspect of care for people with diabetes, within an MDT environment.'

'The Steering Committee support the intent of having an exercise physiologist as an additional member of the Diabetes MDT at the proposed Hospital and Health Services (Metro South, Wide Bay, Sunshine Coast, Townsville, West Moreton, Gold Coast, and Children's Hospital, Cairns).'

Yet, to date none of these positions have been established. There remains only one Hospital and Health Service (Metro North) that employs Accredited Exercise Physiologists in the diabetes multidisciplinary team.

ESSA'S CALL TO ACTION

The incoming Queensland government should ensure diabetes multi-disciplinary teams include access to structured clinical exercise by employing full-time Level 3 positions for exercise physiology in the following Hospital and Health services (HHS):

- Cairns and Hinterland
- Gold Coast
- Metro South
- Sunshine Coast
- Townsville
- West Moreton
- > Wide Bay
- > Statewide Children's Hospital Services

Estimated Investment required: \$700,000 per annum [18].



Expand access to exercise interventions for people with cancer

Cancer is a considerable burden on Queensland's healthcare and economic systems, with annual costs exceeding \$3.6 billion. This cost is expected to rise as cancer diagnoses climb, with 33,000 Queenslanders battling the disease in 2021 alone [24].

Physical activity and exercise interventions is a powerful yet underutilised tool that can prevent and manage the health and financial costs of cancer. The Clinical Oncology Society identified the benefits of exercising among cancer patients and survivors. Exercise following diagnosis is associated with 25%-48% decreased mortality risk and 21%-35% decreased cancer recurrence risk [25].

Studies show that structured exercise programs for cancer patients and survivors can significantly improve their health outcomes. Engaging in structured exercise reduces hospitalisation rates, lowers healthcare costs (e.g. by up to \$22,000 [26]) and improves quality of life, physical function, cardiometabolic health, and psychological wellbeing [27-30].

AEPs bring a valuable skill set that addresses the physical and psychological wellbeing for people with cancer. By working collaboratively with oncologists, nurses, and other specialists, AEPs can design personalised exercise programs that complement traditional cancer treatments and consider other factors such as other health considerations, support networks and socioeconomic limitations.

Despite this, most Queensland funded cancer centres do not employ exercise physiologists to deliver safe and structured exercise programs to cancer patients.

ESSA'S CALL TO ACTION

The incoming QLD government should ensure cancer treatment services include access to structured clinical exercise treatment by employing at a minimum 1.6 FTE Level 3 positions for exercise physiology in the following Hospital and Health Services:

- Metro North
- > Metro South
- West Moreton
- Cairns

Estimated Investment required: \$550,000 per annum [18].





Invest in physical activity in schools

The prevalence of overweight and obesity amongst children has substantially increased in the past two decades [31]. It is estimated that overweight and obese children account for approximately 25% of the school age population [32] which leads to adult obesity and consequently is considered a risk factor for the range of chronic conditions, such as diabetes.

In Queensland, about one-quarter (26.0%) of children are overweight (18.0%) or obese (8.0%), with prevalence of overweight and obesity in Queensland children considered high compared to other Australian states [33]. One in seven children from the Greater Brisbane area were at risk for being insufficiently active and a third spend more than the recommended 2 hours engaged in sedentary activities such as playing electronic games or using a computer for entertainment [34].

Many schools are attempting to meet the federal and state recommendations that school age children take part in 60 minutes physical activity per day by offering sports outside of school hours [32]. However, these services do not support this recommendation as they are delivered by third party organisations, incur a fee, and further widen the gap for children from lower income families. This sets them on a lifelong trajectory of poor health outcomes.

The Department of Education states:

'We employ over 900 allied health professionals who work in state schools. Our health professionals play a critical role in supporting all students to access an equitable education and succeed' [35].

However, there are no university Accredited Exercise professionals employed within this number. Physical activity programs provide instruction and skill-learning opportunities that contribute to the development of physical literacy, which is linked to a greater likelihood of life-long participation, positive attitudes, and behaviours, improved educational attainment and better long term health outcomes associated with being physically active [1].

ESSA'S CALL TO ACTION

Through an ongoing commitment to engage allied health in the education system, the incoming QLD Government should create 6 new roles for Accredited Exercise Scientists to deliver exercise education in Queensland schools:

New Positions

6 x Level 2

Central region x2

Metropolitan North

Metropolitan North x 2 Metropolitan South x 2

Estimated Investment required: \$500,000 approx. per annum [18]





Mandate accreditation for sports scientists working in sports programs

An independent review by the Hon. James Wood AO QC in 2018 found that Australian sport continues to be challenged by a wide variety of integrity threats [36]. Amongst these threats was the ability of government and the sport sector to adequately respond to issues in the sporting sphere including accreditation of athlete support personnel [36].

In December 2017, the Australian Sports Commission, announced the requirements for accreditation for sports scientists and strength and conditioning coaches, with the aim to ensure rigorous governance measures to protect athletes and the integrity of sport. They state that [37]:

'ASC and its high-performance arm, the AIS, will work in partnership with Exercise & Sports Science Australia (ESSA) and the Australian Strength and Conditioning Association (ASCA) to apply the high standards of accreditation to Australian sporting organisations.'

However, the requirement to employ accredited professionals in the delivery of sports performance programs is not mandatory in many settings. For example, the employment requirements for high performance sport management positions in schools is not a standard prerequisite. This is the case for both private and state funded schools.

The employment of personnel that are not accredited increases the risk of potential damage to the health and welfare of athletes, as highlighted in the 2013 Senator Inquiry into the practice of sports science in Australia. Amongst many recommendations from the <u>Government Response to the inquiry</u> was a recommendation 'that accreditation as a sports scientist should be a condition of ongoing employment [38].

Accreditation systems implemented ensure adherence to quality standards and keep the health and well-being of athletes at the centre of all activities. Accredited Sports Scientists (ASpS) and Accredited High-Performance Managers (AHPM) are expected to comply with a regulatory system where they are held accountable for their professional conduct, including an auditing and complaints process, ensuring quality assurance and standards are maintained.

With the Olympics on the horizon, it is concerning that these safeguards in employment of athlete support personnel are not in place.

ASpS and AHPM bring a wealth of knowledge that extends beyond performance enhancement to the overall health and well-being of student athletes. In addition to working with adults, they possess capabilities to tailor training regimens with school age children and young adults to ensure high quality physical development while minimising the risk of injuries.

Mandating a policy to employ only ASpS and AHPM underscores a commitment to ethical conduct and sets a high professional standard. This proactive approach contributes to the overall excellence, safety, and positive development of students participating in elite and sub-elite sports programs.

ESSA'S CALL TO ACTION

The incoming QLD government should safeguard the health and wellbeing of athletes in school settings by mandating the employment of Accredited Sports Scientists and Accredited High Performance Mangers **in sports** programs.

Investment Required: Resource for policy change.

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