

**Submission to the Senate Inquiry:
The Practice of Sports Science in Australia**

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Summary

- Sport has strayed towards valuing performance at the expense of athlete health and welfare
- Issue is practice of sports health science rather than sports science (eg faster racing bicycles)
- Sports health science constantly navigating the health-performance nexus
- Athlete health and welfare needs to be at least equal to or above performance
- Sports health professionals need protections to enable prioritising health and welfare
- Athletes need employment conditions that include health and welfare protections
- Athletes need an independent advocate such as an Ombudsman
- Transparency and accountability problems enable sports to put performance above health
- Practice needs to protect innovation of performance focused sports health science
- No coherent principles guide behaviour within the Australian sporting sector
- The Spirit of Sport provides no insight into an Australian ethics of sport
- Need to develop an Australian ethics of sport
- Few “sports supplements” scientifically effective
- Problems of contamination of sports supplements with prohibited substances
- Improvements in integrity add monetary value to Australian sport
- Explore role of the National Integrity of Sport Unit and Ombudsman for Sport

Recommendations

1. Focus regulation on sports health science
2. Enforce prioritisation of athlete health and welfare in Australian sport
3. Remedy contradictions in legislation and policy that sub-ordinate athlete health and welfare
4. Develop employment protections for sports health professionals executing their role in the best interests of athlete health and welfare
5. Develop a clear definition of sports health practice and require registration
6. Require ethics to become part of sports-related accreditations
7. Make protection of athlete health and welfare part of athlete employment contracts
8. Mandate sporting organisation activity reporting for sports health science, and athlete health and welfare
9. Introduce legislation enabling prosecution and penalties for failures to protect athlete health and welfare
10. Develop and support an Australian “ethics of sport”
11. Regulate the use of the description of products as a “sports supplement”
12. Expand the National Integrity for Sport Unit to include ethics in sport
13. Establish an Ombudsman for Sport

1. Introduction

Sports health science has strayed too far towards valuing performance at the expense of athlete health and welfare. This is reflected at every level of sport where performance is prioritised above health and welfare, from country town heroes playing while injured to the pursuit of Olympic medals at the expense of mental health. It is reflected structurally where sports physicians and other sports health professionals are asked to prioritise the needs of their club or their sport over the health and well-being of the athlete or player under their care. Australia needs to develop architecture for sport that structurally establishes athlete health and welfare as at least equal in priority to performance.

2. Sports Health Science a Sub-Discipline of Sports Science

Sports science is an important and influential part of the general effort made by those using the scientific method to investigate and explain the human condition. The method can be applied to a wide range of issues arising from the practice of sport, from nutrition to psychology to biomechanics to coaching to engineering to information technology. Sports science benefits society more generally, playing a central role in improved road safety technology, better prosthetic limbs, and innovations in telecommunications.

Sports science goes well beyond health, which seems to be at issue in the fallout from the Australian Crime Commission Report “Organised Crime and Drugs in Sport” (the ACC Report). It is relevant to remember that the role of drugs in sport emerges from the sub-discipline of sports science that has its roots in the medical and allied health sciences.

The issue at stake following the ACC Report is therefore the practice of “sports health science” in Australia. Efforts to regulate sports science more broadly may impact negatively on non-health related sports sciences that legitimately prioritise performance (e.g. faster racing bicycles). This potential problem can be averted with regulation specific to sports health science.

The focus for the following discussion therefore seeks to address the fallout from the ACC Report in terms of regulating sports health science.

3. The Health-Performance Nexus

Sports health science has health and performance of athletes as its twin goals [1]. Which element is prioritised depends on the disciplinary background of the health scientist. For example, those with a medical or allied health background may declare athlete health as the dominant priority.

The permeable boundary between health and performance is most clear in sports medicine. The rise of sports medicine emerged from the general interest in athlete health and the unique problems associated with sports injuries. That is, sports medicine focused on secondary prevention by treating the consequences of sport for participant’s health. As medicine engaged with primary prevention (stopping illness or injury before it happens), the natural extension for sports medicine was preventing injury or illness among athletes. For example, this may include supplementing an athlete preventatively to overcome possible immune system suppression as a result of high intensity training. Equally, evaluating the biomechanics of technical skills could prevent stress fractures (e.g. fast bowlers in cricket).

The role of performance begins to emerge when primary or secondary actions lead to improved performance. For example, in terms of secondary prevention, baseball pitchers receiving Tommy John surgery for pitching arm injuries (e.g. ulnar collateral ligament reconstruction) can return with a better fast ball speed. The uptake of Tommy John surgery among uninjured individuals is of concern in the United States [2]. While this represents a simplification of a complex health and performance issue, the emergence of health related interventions with performance implications saw sports

medicine wrestle with and eventually accept the interest in performance as part of the sub-discipline. It is unclear whether sports medicine prioritises health over performance, or whether they are considered of equal value. There is no indication that, as a profession, sports medicine prioritises performance above health.

The story is similar for sport psychology, which attempts to address health and performance outcomes of sport. In terms of health, there is a strong literature around athlete welfare through career transitions. In terms of performance, there is a strong literature around training for decision making in competition. Again, it is unclear how sport psychology prioritises health and performance.

The story is repeated across sports health sciences, although there is no indication where the priority lies in practice as the research has simply never been done. While sports health professionals and sports organisations claim to prioritise health, there is no peer-reviewed evidence to substantiate such claims. The only peer-reviewed evidence available on this subject indicates that the Australian general public sees health as a secondary consideration when it comes to elite sport [3]. This is borne out in the hyper-masculine culture of Australian sport which sees playing while injured as a virtuous activity to be admired and applauded. If sports health science and sports science more broadly prioritises other concerns above that of athlete health, they are arguably reflecting the society they come from.

In my opinion Australia has strayed towards valuing performance over the health and well-being of athletes. At the federal level the focus of the sports academy and institute system in Australia is to use sports health science to provide a competitive advantage through enhanced performance (e.g. world records). The need to prioritise athlete health and welfare has been lost in pursuit of Olympic medals.

Given the Australian pyramid model for sport, this change must come from the top. How Australia prioritises health and welfare among the elite becomes the model for how club and junior sport prioritises health and welfare for the rest of Australia.

A decision is needed about how Australia wants to prioritise the health-performance nexus. Athlete health and welfare needs to be prioritised as at least equal to or above performance.

4. Architecture to Promote Health Through and Within Sport

The discussion of architecture refers to structural issues that interfere with the prioritisation of health in sport. Three exemplars are considered as starting points to develop the architecture with regards to sports health professional, athletes and sporting organisations.

There is architecture in place that can be applied to sport. For example, the risk management approach of workplace health and safety could be a relevant protection when athletes are employees, although this is yet to be tested. This leaves recreational, amateur and semi-professional athletes without specific protections. Regulation to promote health and welfare needs to look beyond elite and professional sport.

4.1 Sports Health Professionals

4.1.1 Conflict of Interest: A core problem for sports health professionals is conflict of interest. The first example of conflict of interest comes when sports health professionals are required to prioritise interests other than those of athlete health and welfare. The anti-doping scheme requires sports health professionals to report doping behaviour even when it may be contrary to the best interests of athlete health and welfare [4]. For example, a physician asking about drug use for contraindications may discover an anti-doping rule violation (e.g. marijuana). Failure to report use of a prohibited

substance in competition could see the sports health professional sanctioned for failing to report, or struck off the register of medical practitioners for disclosing confidential patient information. *Work is needed to remedy contradictions in legislation and policy that sub-ordinate the interests of athlete health and welfare.*

The second example of conflict of interest comes from employment. Sports health professionals can be asked to put the interests of the club or sport ahead of the interests of athlete health and welfare [5, 6]. At the non-elite level, this can be in terms of a volunteer sports trainer being abused by a coach wanting the local star player back in competition even though they are clearly concussed. At the elite level, pressure may be put on sports health professionals by coaches, managers and athletes to return the injured or ill to competition before they are ready. This pressure can include threats to terminate employment or “doctor shopping” to find a sympathetic opinion. *Work is needed to develop employment protections for sports health professionals executing their role in the best interests of athlete health and welfare.* For example, this may come in terms of legislation specific to sport around unfair dismissal of registered sports health professionals.

4.1.2 Registration: Most sports health professionals must register with the Australian Health Practitioner Regulation Authority (AHPRA) as a precondition to practice. There are some elements of sports science that have implications for sports health science that fall outside this remit. For example, a biochemist could have a legitimate interest in sport and practice without AHPRA registration. One response is to *develop a clear definition of what is considered sports health practice and require registration to use the title and engage in practice.* For health professionals already registered this becomes a specialisation (with attendant professional development implications). The onus then comes to other scientists to register if they seek to work in areas that have sports health practice implications. For example, the biochemist would have to register as a sports health professional to work with a sports club. This prevents sports organisations shifting a job title from “sports scientist” to “biochemist” to get around registration. Registration means sports health scientists who fail to act in the interests of athlete health and welfare can be more closely monitored, investigated and sanctioned.

4.1.3 Accreditation: There are two ways to expand accreditation activity. The first is to work with organisations like Exercise and Sports Science Australia (ESSA) to develop a tiered system of qualification and experience accreditation similar to that seen in other aspects of sports health practice. This addresses a narrow part of sports science that legitimately concerns itself with performance rather than health. The peak body Sports Medicine Australia (SMA) may be in a good position to develop a more coherent set of guiding principles for accreditation across its member sports health science organisations.

The other side to accreditation is ensuring aspects of sports science that have health implications are also accredited. For example, a stronger requirement around accreditation of coaches or sports trainers may be necessary, such as requiring an examination of the role and practice of sports science and sports health science, responsibilities with regards to athlete health and welfare, and sports ethics. See Section 5 for an expanded discussion on this point.

4.2 Athletes

4.2.1 Employment Conditions: There is significant academic literature examining exploitation of athletes. While many assume elite and professional sport is a wealthy environment this true only for the stars, and usually only males. Part of this is exploitation of an athlete’s health and welfare [7, 8]. While many athletes willingly comply with what is asked (or demanded) of them, it is only after the experience they realise they have engaged in practices that impugn their health and welfare. At this point, professional athletes appear to have little recourse.

When other employment categories experience health consequences as a result of service, there is usually some recourse or remedy offered. For example, the Department of Veterans Affairs is the explicit acknowledgement of the responsibility borne by Australia for the significant health implications associated with military service. Where Australian Government sponsored athletes have risked their health and welfare for national pride a similar system might be appropriate.

Given the apparent failure of the private sector, *the Australian Government should intervene to make protection of athlete health and welfare a requirement of athlete employment contracts*. This should extend from the elite level to the semi-professional (e.g. players contracted for single games in regional leagues). This may have health insurance implications, and in doing so makes athlete health a risk that needs to be explicitly managed. For example, clubs with strong management of athlete health may have lower premiums than clubs that tend to “break” athletes.

Notably, this contract goes both ways. Such an approach opens recourse for clubs (employers) where athletes (employees) act in ways that compromise their health. For example, this could include the unsupervised use of substances, binge alcohol consumption, overtraining, street violence, unsafe driving and so on. The corollary precedent emerges from practice around behavioural regulation in other employment sectors, from the law to child care to emergency services.

4.2.2 Ombudsman for Sport: The power relationships in sport that give rise to exploitation mean athletes often have nowhere to turn. While athlete and player associations have had rising influence, advocacy on athlete health and welfare has been less prominent in this rise. It may be worthwhile to establish an independent athlete advocate that can investigate and assess whether due process with regards to athlete health and welfare has been followed. It may be appropriate to establish an *Ombudsman for Sport*. While the entry point for establishing such an Ombudsman is athlete advocacy, the same can be said for any aspect of due process in relation to the practice of sports health science. The implications of an Ombudsman are expanded in Section 7.2.

4.3 Sporting Organisations

The next phase of innovation in sporting management may be to leverage the corporate structure to include athlete health and welfare. This is characterised in terms of introducing reporting requirements and penalties in relation to athlete health and welfare.

The contention underpinning this line of argument is that sporting organisations tend to treat athletes as the object rather than the subject of their efforts [8]. That is, sport is something which is done to athletes rather than for athletes. For example, sports science is something which is usually done to athletes in pursuit of organisational goals rather than for athletes by ensuring freedom from chronic morbidity at age 50 (e.g. dysfunctional knee joints).

Instead, the subject of sport is its own self-interest in terms of both survival and prosperity. The failure of sporting organisations to appropriately value athlete health and welfare requires regulatory intervention that compels sporting organisations to make athlete interests at least one subject of their efforts.

4.3.1 Self-Regulation of Sports: Governments have typically relied on sports to self-regulate. Courts have also typically been reticent to intervene in issues of sports governance.

There is a reliance on a system of tribunals or arbitrators governed by the constitutions of sporting organisations. For example, the Court of Arbitration for Sport (CAS) is a forum that complainant and defendant from sport agree to be bound by rather than a genuine court [9]. While the members of

CAS may be well regarded for their capacity to adjudicate, it still sets its own rules and guidelines and, as a private body, can refuse access (e.g. costs to access). The consequences of this can be seen with regards to the rules governing evidence in doping, where the standards required to prosecute an athlete are lower than the standards required for appeal [10].

Sporting tribunals or arbitrators, which exist at the sufferance of their sport, are there to act in the interests of the sport rather than any individual. Thus, the tribunals are accountable to private interests rather than the interests of society in general.

The problem extends to corporate governance more generally where conflict of interest emerges from multiple memberships across boards and executives [11]. This means that sport organisations can co-ordinate responses to ensure the interests of sport are consistently promoted above that of athlete health and welfare. For example, when Pat McQuaid was responding to the Lance Armstrong scandal, it was unclear whether it was as President of the International Cycling Union (UCI), a member of the International Olympic Committee, or a member of the Executive Committee of the World Anti-Doping Agency. Athlete health and welfare may have played a very different role if McQuaid was acting solely in the interests of the UCI.

Protection of athlete health and welfare needs support in terms of transparency and accountability.

4.3.2 Transparency: Sporting organisations have been arguably complacent when it comes to the role of sports health science, demonstrated by the Switkowski Report on the Essendon Football Club and the Woods Cycling Australia Review (CAR). For example, the CAR found that Cycling Australia was more interested in managerial compliance with anti-doping rather than committing resources to activities that would protect member health in relation to substance use. This complacency extends to sports health science, where Australian sports health professionals appear disinterested in responding to issues like anti-doping [12]. In reversing this complacency, sporting organisations must be made to care. One way to do this is to establish *mandated reporting on activity (beyond compliance) in relation to sports health science, and athlete health and welfare*. This can assist government in determining funding models and sports consumers where to invest.

4.3.2 Accountability: Another method to make sporting organisations care is to *introduce legislation enabling prosecution and penalties for failing to protect athlete health and welfare*. There needs to be clear consequences for placing athlete health and welfare as secondary or tertiary considerations. For organisations, these consequences might be in terms of fines or suspension of trading rights. Legislation might be introduced that makes individuals personally liable for their actions within an organisation (like the Workplace Health and Safety Acts). This creates a set of organisational incentives. For example, managers will care a lot more about what is happening in their “sports science” departments if they can be held personally liable for an athlete being told their contract is contingent on their substance use.

4.4 Potential Unintended Consequences of the Architecture

It is unclear what the implications of structurally prioritising health and welfare might be for sports health science that legitimately prioritises performance. One unintended consequence could be the loss of innovative technology. For example, as therapeutic drugs (e.g. methylphenidate) can have performance enhancing effects for sport (and other aspects of society) so the “doping industry” may develop innovative drugs to enhance sporting performance that have therapeutic benefit [13]. Restricting the performance aspect of sports health science may diminish its capacity to innovate.

5. Ethical Obligations of Sports Health Scientists

Sports health professionals typically draw on the rich ethical traditions arising from millennia of medical practice subject to regulation by government (e.g. AHPRA). Existing professional codes and legislation governing the practice of sports medicine give guidance on how sports physicians should behave, the opportunity to defend breaking the code, consequences for breaching obligations, and a rich ongoing debate about clinical, professional and research ethics. By comparison, scientists or health scientists seeking to engage with sports health may have less strict codes without legislative support, and have different priorities (e.g. discovery of knowledge is more important than the consequences of that knowledge, such as knowing that a drug works rather than what it might be used for). Sports scientists without a specific disciplinary or professional background (e.g. biochemists) may instead rely on the ethics of sport.

The discussion on the health-performance nexus represents a critical part of establishing a clear ethics of sport. It seeks to establish clear guidance on what is “right” in terms of the relationship between health and performance. The fallout from the ACC perhaps represents frustration with this ambiguity among sports health professionals, sports health scientists, sporting organisations, sports consumers and the general public.

5.1 The Spirit of Sport

The ethics of sport around the health-performance nexus are characterised by the World Anti-Doping Code’s (WADC) “Spirit of Sport” statement. This statement includes 11-values declared to represent the basis of Olympism (see Table). This statement is the moral basis of anti-doping and the test used to evaluate sports technologies in terms of their influence on health and performance.

WADC - Spirit of Sport	
1. Ethics, fair play and honesty	7. Dedication and commitment
2. Health	8. Respect for rules and laws
3. Excellence in performance	9. Respect for self and other participants
4. Character and education	10. Courage
5. Fun and joy	11. Community and Solidarity
6. Teamwork	

The Spirit statement has been heavily criticised for being ambiguous and thus open to “creative” interpretation and reinterpretation [3, 13, 14]. For example, if sport valued fair play then doping may overcome performance deficits experienced by athletes from poor nations. This ambiguity leads to questions about what constitutes ethical practice around substance use in sport. Rather than resolve the ambiguity, anti-doping assumes asserting the values is sufficient and requires no elaboration. Thus, ethical practice in sport (at least in terms of anti-doping, and probably more broadly) becomes a matter of belief akin to religion rather than enlightened or rational. The consequence is that the ethics of sports (at least in terms of anti-doping) has been reduced to the emotional ambiguities of “righteousness”.

At best, references to the Spirit of Sport mean different things to different people based on their perception of what is believed to be “right”.

The ambiguity seen in a Spirit of Sport means *there is no coherent set of well defined principles that establishes expectations or guides behaviour within the Australian sporting sector*. Sports ethics then reflect the cocktail of individual beliefs, and interests across the corporate, public health and government sectors. Which set of interests dominate at any particular time for any particular decision is highly variable. For example, sports scientists who have only worked at the elite professional level may have a very different approach to what is right compared to a public servant or junior athletes by virtue of their exposure to corporate realities (e.g. players needing to recover from

injury quickly to earn a match fee). This variation is seen in the subtle and nuanced views elite athletes have about the ethics of doping compared to the blunt “black and white” views of the general public [15, 16].

It is worth noting that the Spirit statement is intended to reflect only the ethics of Olympic sport. The Spirit statement has been subsequently conflated such that it assumes Olympic sport represents all sports, although this may be far from the case. For example, the values underpinning Olympic sport may fail to accord with the values associated with non-Olympic sports. Further, the Spirit statement has the character of “muscular Christianity” [3], which reflects a particular version of mid-19th century protestantism (e.g. Tom Brown's School Days) [17, 18]. As a result, the values in the Spirit statement have been criticised as failing to resonate with ethical systems arising from non-protestant religions or cultures [19]. As an ethical basis for sport, the Spirit statement may be a good starting point that needs development before being used as an ethical basis for Australian sport.

5.2 An Ethics of Australian Sport

An Australian sports ethic needs to recognise the multiple stakeholders and realities of modern sport rather than relying on outdated and romanticised notions of sport. For example, modern Australian sport involves the corporate sector which has a duty to shareholders and sponsors, more so than they have to health promotion.

Scientists share an interest in discovering new knowledge using the scientific method, with how that knowledge might be used a potentially lower priority. Sports health science, sports science more broadly and the sports sector in general need guidance on how to prioritise these multiple competing interests, a forum to safely discuss breaking the rules, and to develop a rich discussion about sports ethics.

The Australian Sports Commission (ASC) has attempted to promote interest in sports ethics and the philosophy of sport more generally, but, like the discussion of athlete health and welfare, this appears to have been lost in response to efficiency dividends prioritising Olympic medals. The disinterest in sports ethics is reflected in other areas of the sector, evidenced by the absence of discussing what constitutes ethical practice for sports science and sports medicine at the Australian Conference of Science and Medicine in Sport, Australia's premiere sports science conference. Indeed, attempts to stimulate debate on the role of drugs in sport within Sports Medicine Australia have had little effect, with that organisation yet to establish a position statement [20-23]. The discussion of ethics in sports health science and sports science more broadly appears to be confined to small groups of philosophers or ethicists with limited impact on practice.

5.3 Ethical Stimulus

Stimulating the discussion on ethical practice of sport might be achieved with the ASC or the National Integrity in Sport Unit (NISU) being mandated to redeploy resources towards developing a more vibrant ethics of Australian sport. This could include helping Australian sporting organisations implement those ethics as part of professional and athlete development. It may also be useful to exploit existing government funding for sports health science, such as establishing philosophy and ethics of sports health science as part of the Anti-Doping Research Program.

The corollary to expanding Australia's engagement with sports ethics is to professionalise various aspects of sports science. Accreditation or registration as a sports health scientist could be contingent on tertiary qualifications (preferably university) with an “ethics and philosophy in sport” course as part of those programs.

6. Regulation of Sports Supplements

A fundamental part of the fallout from the ACC Report is the role of supplements. This is separate to the discussion of licit (e.g. alcohol and prescription drugs), illicit (e.g. heroin) and doping (e.g. anabolic steroids) substances in sport.

The question of supplements has been a vexed question for US and European regulators. Unlike pharmaceutical substances there is no Phase I-IV testing for effect or safety. Sports supplements are typically sold on claims of enhancing health or enhancing performance. Most make these claims in the absence of evidence. The AIS has invested significant resources into establishing a list of supplements whose performance enhancing claims are supported by peer-reviewed evidence; this list is remarkably short.

To gain market share, supplement manufacturers have been known to deliberately contaminate batches with prohibited performance enhancing substances [24], such as protein powders laced with Anabolic Androgenic Steroids or “high energy” formulations with amphetamines. This creates rumours about the effectiveness of the supplement and sees a rush of purchases. By the time consumers learn that some batches are more effective than others, the manufacturer can move to a new brand name and repeat the cycle.

The simple answer is to *regulate the use of the description of a product as a “sports supplement”*. For example, to be sold as a sports supplement, the supplement could be required to have independent peer-reviewed evidence that it has the claimed health or performance effect and evidence that it is safe to use.

In response to potential batch contamination, the supplements could be required to have a *certificate for each batch from an accredited private laboratory* that shows the product only includes substances appearing on the ingredients list. Any increase in retail price is justified given the higher standards of manufacturing and testing, which should appropriately be borne by consumers of those supplements. Such a process would stimulate scientific research into the properties of various supplements relative to sport, potentially leading to benefits for society more broadly.

The regulation of non-sports supplements (e.g. Vitamin C) would remain as it currently does. Therefore, athletes can access the full range of supplements, although those without the sports supplement label carry with them risks specific to sport.

7. Integrity in Sport

The issues emerging from the discussion around sports health science point to broader issues at stake with regards to the practice of sport in Australia. The role of drugs in sport and the role of sports science represent only two issues that influence what might be termed the “integrity of sport”. In this instance, the integrity of sport refers to the way in which sport is produced. That is, sports production (whether broadcast or local recreational sport) appears vulnerable across match fixing, gambling, alcohol, anti-social behaviour, gender inequities and violence. Thus, the outcomes of the ACC Report and subsequent interest in sports science point to the broader issue of integrity across the sports production cycle.

To be clear, Australian sport is internationally regarded for the integrity with which it is practiced. The CAR makes it clear that part of the monetary value for Australian cyclists is the reputation of integrity in Australian sport. The investment in protecting the integrity of Australian sports production therefore has the capacity to increase the value of Australian sport more generally.

7.1 The National Integrity of Sport Unit

It may be worthwhile looking to expand NISU. For example, NISU could look to adopt an approach akin to the Canadian Centre for Ethics in Sport. As part of this expansion, NISU might look towards co-ordinating the development of or developing an insight into what constitutes an Australian ethics for sport. This creates a set of well-defined values that guide decision making and can be used as a reference point in other contexts. This would be a “living document” as evolution in sports health science and sports science more generally compels re-evaluation of what might be considered “right” for Australian sport. These debates are currently happening with regards to performance enhancing technologies which have the capacity to fundamentally alter the concept of “work” [25]. The model for this aspect might be the National Health and Medical Research Council statement on ethical human research.

7.2 Ombudsman for Sport

The need for an Ombudsman for Sport flows from the claims around needing an athlete advocate, and extend to the transparency and accountability concerns raised around the tribunal system. The strength of an Ombudsman is critically dependent on the strength of the processes they are asked to inform. In the case of sport, the ambiguity associated with rationales (e.g. ethics) and practices (e.g. tribunals) may make it difficult for an Ombudsman to establish whether due process was followed, and that failures in due process can be identified and referred appropriately. This reinforces the need to establish a stronger architecture around athlete health and welfare and sport more generally.

That being said, there are benefits to establishing an Ombudsman even with architectural ambiguity. For example, athletes need to have a third party they can go to for guidance or more formal inquiry in relation to their treatment by sporting organisations. Sporting organisations can benefit from processes and procedures being legitimised under impartial assessment without resorting to legal proceedings.

8. Conclusion

It is easy to think of sport in terms of a sanitised two-dimensional video broadcast. The ACC Report has pointed to the very real human element to sports production. In essence, the ACC Report points to the need for Australian sport to evolve.

Sport only functions as a positive force in society when those who participate find value, whether athletes, administrators, trainers, scientists or fans. It is incumbent upon Australians to value the people who make sport happen. Making athlete health and welfare a centrepiece provides a platform for strengthening integrity in the Australian sport.

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Memberships

Full Member, Australian Psychological Society

Professional Member, Sports Medicine Australia, Director of Sports Medicine Australia ACT

Full Member, Sports Management Association of Australia and New Zealand

Senior Member, International Network for Humanistic Doping Research

Editor-in-Chief, *Performance Enhancement and Health* (Elsevier)

Chair, Social Research Sub-Committee, ACT Health Human Research Ethics Committee

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