## Northumbria Research Link

Citation: Scott-Bell, Andrea and Malcolm, Dominic (2015) 'Involved in every step': how working practices shape the influence of physiotherapists in elite sport. Qualitative Research in Sport, Exercise and Health, 7 (4). pp. 539-556. ISSN 2159-676X

Published by: Taylor & Francis

URL: https://doi.org/10.1080/2159676X.2014.968605 <a href="https://doi.org/10.1080/2159676X.2014.968605">https://doi.org/10.1080/2159676X.2014.968605</a>

This version was downloaded from Northumbria Research Link: http://nrl.northumbria.ac.uk/29769/

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: http://nrl.northumbria.ac.uk/policies.html

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)





'Involved in Every Step': How Working Practices Shape the Influence of Physiotherapists in Elite Sport

#### **Andrea Scott and Dominic Malcolm**

#### **Abstract**

This paper examines how the medical and non-medical skills of physiotherapists enable members of the profession to become central agents in the multidisciplinary teams (MDTS) which dominate sports healthcare. Drawing on empirical data derived from interviews with sports physiotherapists and doctors working in UK Olympic sport MDTs, this article argues that the role and influence of physiotherapy in elite sports healthcare can be explained in relation to physiotherapy's working practice traditions and the degree to which these traditions correspond to their specific patients' demands. Drawing on concepts such as medical dominance and relative practice autonomy drawn from the sociology of medicine, the paper argues that extended time, close physical contact and opportunities for experiential learning foster physiotherapist-patient mutuality, locates the physiotherapist as an inherent part of the recovery process, and leads to trusting and collaborative healthcare relations. The practice traditions of physiotherapy enable these practitioners to respond flexibly to the particular demands of elite sports clients, intertwining athletes' performance orientation with physiotherapists' treatment through blurring the boundary between healthcare and sports training. Physiotherapists thus become seen as 'useful' in the eyes of the clients who shape the demand for healthcare delivery in elite sport.

# Problem Solvers: The Working Practice and Professional Boundaries of Sports Physiotherapists

Within the growing body of literature analysing the delivery of healthcare in elite sport there is a broad consensus: a) that sports medicine is a clients dependent practice in which lay evaluation and the pursuit of performance goals fundamentally contours the work of clinicians; and b) that a distinct set of inter-professional relations exists. For instance, in relation to the former, Malcolm (2006) argues that 'the role of sports clinicians would best be described as a *clients*-dependent practice' (p. 384) while Theberge (2008, p. 23) describes sports medicine as 'a consumer based model of occupational control'. Theberge (2009a, p. 278) further notes the 'absence of clear boundaries demarcating the work of the professions' in Canadian elite sports medicine, while Bundon and Clarke (2012, p 11-12) argue that elite Canadian athletes engage with both biomedical practitioners and a range of complementary and alternative medicine providers as they seek to 'use everything at their disposal to optimise sport performance'.

The structure of the specific context in which elite sport healthcare is delivered may vary cross-culturally (e.g. athletic therapists are relatively well established in North American sports, while a similarly qualified group – sport therapists – are just emerging in the UK) and/or in relation to the financial resources committed to the pursuit of sporting excellence (for instance, changes in the UK have been driven by the establishment of the Home Countries Institutes of Sport (HCIS) in 2002 and the recent (2006) state recognition of sport and exercise medicine as a medical specialism). However, elite sport conforms to the broader trend in healthcare towards the utilisation of multidisciplinary teamwork (Suddick and de Souza 2006). While this model has largely emerged in the absence of any other formalised occupational structures or rigid professional relations (Reid *et al.* 2004), physiotherapists are invariably central to these

multidisciplinary teams (MDTs).

To date, studies of sports physiotherapy have located the work and influence of this professional group in relation to that of other healthcare providers in sport, particularly doctors (Malcolm, 2006; Malcolm and Scott, 2011) and chiropractors (Theberge, 2008, 2009a, 2009b). While this has generated considerable knowledge gains, this article is the first to understand the role and influence of sports physiotherapists by locating their work within the wider context of physiotherapy's historical status, practice and aspired competencies.

#### Physiotherapy: status, practice, competencies

Historically the professional status of physiotherapy has been structured by what sociologists and historians of medicine have termed 'medical dominance'; the strategies medical practitioners use to control other actors in the wider medical division of labour (Turner 1987). Larkin (1983, p. 124) notes how 'the physiotherapist was incorporated into the modern medical division of labour through a system of patronage which reflected medical interests'. Through medical policing of the profession's administration and accreditation, and by likening massage to a prescription drug, physiotherapists were effectively 'forced to depend on them [doctors] for work' (1983, p. 119. See also Nicholls and Cheek 2006). The original constitution of the American Women's Physical Therapeutic Association identified the desire 'to make available efficiently trained women to the medical profession' as one 'purpose' of the association (Swisher and Page 2005, p. 34).

Physiotherapy subsequently developed greater professional autonomy through the establishment of national and international professional bodies which formalised training and qualifications, argued for the right to self-management, and fought 'turf wars' with other professions over the boundaries of practice (Swisher and Page 2005, p. 35). In the post-war

British context Øvretveit (1985) outlines 'clinical autonomy', where physiotherapists take sole responsibility for clinical decisions, and 'practice autonomy', where physiotherapists assess patient needs, and organise their 'own case load rather than responding to referrals' (Øvretveit 1985, p. 88) as fundamental aspects of this process.

But the extent to which physiotherapists are relatively autonomous in health care contexts is also influenced by macro-social factors such as the organisation of health care systems (Bury and Stokes, 2013; Jensen *et al.* 2000). For example, funding models, health care policies, advocacy of key groups and support from the medical profession all have a direct impact on the working practices of physiotherapists (Suckley 2012; Bury and Stokes 2013). One recent such manifestation of this relates to the ability for physiotherapists to act as 'first practitioners' so that patients/clients may seek services 'without referral from another healthcare professional' (Bury and Stokes 2013, p. 450). Organisations such as the APTA and World Confederation for Physical Therapy (WCPT) have been advocates for direct access/self referral to improve access to physical therapy services and meet practitioner goals. The greater ability of physiotherapists to control their own work is also noted by Jensen *et al.* (2000, p. 29) who argue that pressures on physiotherapists for 'effective and efficient management of patients' stem from changes in the organisation of health care delivery where both legislation and direct access appear to increase physiotherapists' influence over their practice domain.

While there appears to be consensus that professional autonomy has increased for physiotherapists as a result of lobbying by key organisations leading to organisational change, Sandstrom (2007) notes that autonomy remains constrained by the impact of technical autonomy (decisions/procedures related to one's work), socioeconomic autonomy (control over economic resources), rationalisation (influence of other social institutions) as well as the relative insularity

of the profession. Drawing on the US context, he argues that a degree of medical dominance remains in that patient access and resource allocation is still controlled, to a greater or lesser extent, by physicians. This is compounded, for example, in recent Medicare Payment Advisory Commission (MEDPAC) policy that 'reaffirmed the traditional dominance of physicians to control and direct patient access' to resources provided by physical therapists (Sandstrom 2007, p. 102). Furthermore, 'employment in bureaucracies' (i.e. organisations which are controlled by 'techno-bureaucratic' professionals such as administrators and accountants) limits professional autonomy by 'placing power in the bureaucracy' (p. 101) and not with the professions. Thus, despite general improvements in professional autonomy for this practitioner group (on paper at least), professional legislation, the medical profession and policy makers are perceived to both enable and constrain increases in autonomy for physiotherapists.

Other studies highlight the importance of micro-social relations for the relative autonomy of a profession, and in particular how the essential presence of the physiotherapist throughout treatment creates a distinct working practice for physiotherapy. For instance, Thornquist's examination of physiotherapists working in Norwegian private practice suggests that physiotherapy practice 'extends beyond established categories' of examination (1995, p. 187) in that it focuses on the functionality of the patient's body and embraces their experiences and opinions. In this respect physiotherapy is strongly influenced by experiential learning (compared, e.g., to medicine where innovations are largely laboratory-led). Because physiotherapy has mainly developed out of practical experience, physiotherapists 'confirm their professional identities by doing something for the patient' (Thornquist 1994, p. 709). Jensen *et al.* (2000) concur, highlighting that the 'expert' in a practice encounter was someone who 'held a set of reasoning strategies that could be used to solve problems' (p. 30). Their investigation of four

clinical specialties utilising physical therapists emphasises the importance of clinician-patient collaboration that allows patients to return to functionality. Similarly Parry's (2009, p. 837) work with physiotherapists in neurological rehabilitation argues that because patients are largely unable to reject treatment recommendations, and indeed are often required to exhibit 'effortful co-operation', physiotherapist-patient communication serves particular functions. Like Jensen et al. (2000), Parry (2009) argues that interactions tend to be educative and foster mutuality which thus helps dissipate patient resistance. Wiles *et al.* (2004) suggest that physiotherapists also operate strategic emotion management in the process of patient discharge. By invoking uncertainty, and thus elements of hope, disappointment is deferred and patient compliance fostered. Physiotherapists thus work to sustain trust and in the face of what patients may view as treatment failure.

### **Sports Physiotherapy**

While sports physiotherapy has been described as particularly well placed to respond to future healthcare needs due to the increasing state emphasis on promoting health through physical activity (CSP 2008), and has been identified as a field of considerable growth and 'a particularly lucrative area of specialisation' (APA 2011), research embracing sports physiotherapists has, to date, largely focussed on elite sport and, in particular, the status of physiotherapists relative to other healthcare practitioners. For instance, Malcolm's (2006) analysis of the relations between physiotherapists and doctors practicing at English rugby union clubs reveals a work setting in which (relatively) well qualified sports-specialist physiotherapists exhibit considerable autonomy over treatment and diagnosis, and significant control over physicians' access to athlete-patients. Malcolm (2006) argues that sports physiotherapists are able to direct the division of labour in

this way because they are seen as skilled, professionally oriented, and especially able to contribute towards athletic performance. Malcolm and Scott (2011) similarly report relatively cooperative and equal social relations between doctors and physiotherapists providing healthcare to British athletes in Olympic sports. Physiotherapists, they argue, are empowered by an organisational context which both enables the development of their expertise through specialisation and constrains the role of doctors. McEwan and Taylor (2010, p. 85) suggest that physiotherapists resist the encroachment of other health care professions by being gatekeepers of appropriate knowledge and consequently that they are 'often viewed as the dominant clinician in terms of being the only full-time healthcare professional working with a [sports] team'.

Theberge's analysis of sports physiotherapy derives from a study of MDTs in Canadian elite sport. Relations between physicians and physiotherapists are described as 'collegial and smooth' (Theberge 2008, p. 24). Both chiropractors and athletic therapists view physiotherapists as encroaching professional boundaries (the process whereby the established roles of one healthcare profession are undertaken by another occupational group) and expanding their range of treatments to enhance their utility. However, physiotherapy ultimately retains a dominant position which, Theberge (2009a, p. 280) suggests, likely derives from its 'historical integration into the broader biomedical system'. Theberge also emphasises how professional relations and identities are contoured by specific practice settings. Due to considerations of cost and the likelihood that musculo-skeletal injuries will place a premium on the work of a physiotherapist relative to a doctor, often (though not necessarily) only the former will travel with the team to competition events. Subsequently, the physiotherapist may be perceived as an 'umbrella person' (2009b, p. 62). A significant, though not absolute, 'levelling process' suggests a 'reconstitution of the hierarchy of health professions' in this setting (2009b, p. 58). Theberge, like Malcolm

(2006), suggests that these professional relations are largely shaped by the consumer-oriented focus of sports medicine, which is primarily driven by performance concerns.

To identify sports physiotherapy practice and aspired competencies one needs to explore the statements made by professional associations. In an explicit attempt to internationally standardise sports physiotherapy and consolidate the status of this emerging occupational group as a postgraduate level specialism, the International Federation of Sports Physical Therapy (formed in 2000), sought to develop a set of competency statements (Bulley and Donaghy 2005a) and performance standards (Bulley and Donaghy 2005b). Eleven competencies across four domains of practice were identified to encapsulate the sports physiotherapists' various professional roles. The four domains of practice were manager of patient, advisor, professional leader and innovator. Within the first domain 'injury prevention', 'acute intervention', 'rehabilitation', and 'performance and enhancement' were identified. As an innovator and professional leader, sports physiotherapists were required to engage in 'lifelong learning', 'extending practice through innovation' and 'dissemination'. It is noted that sports physiotherapists will invariably practice in MDTs. The identification of these competencies represents the development of a sports specialism, shaped by the healthcare demands of the twenty first century, but which is cognisant of, and to some extent formalises, the practice traditions of physiotherapy identified above. Most recently, in an attempt to verify current competence and practice among members of the American Physical Therapy Association (APTA), Reinking et al. (2014) highlighted 77 competency statements spanning 6 competency areas including: rehabilitation/return to sport, management of acute injury/illness, performance medical/surgical considerations, professional enhancement, injury prevention and

\_

<sup>&</sup>lt;sup>1</sup> 'Physical Therapy' is the American English equivalent to 'Physiotherapy'.

roles/responsibilities. While this research stems from the US, standards for those physiotherapists practicing in Europe who operate under the professional title 'physical therapist' or 'physiotherapist' are expected to be competent at the levels described by the European region of the WCPT.

In what follows we argue that the inter-professional relations in which physiotherapists are enmeshed, and working practice traditions of their profession, are fundamentally interrelated. We (somewhat implicitly) draw upon a figurational or Eliasian sociological perspective which has, as guiding principles, two theoretical ideas that are of particular relevance here. First, Elias (1978) sought to bridge what has frequently been called the macro-micro sociological divide, or research which focusses upon a high generality of understanding and research which focusses on the minutiae of everyday life. Thus, rather than giving primacy to one or the other, or to perpetuate this false dichotomy, our analysis stems from a model that is cognisant of both the macro-structure of the physiotherapy profession and micro-sociological aspects of routine practice, and how they combine to impact on the role and autonomy of physiotherapists working in sport. Second, Elias used a conceptualization of power as polyvalent and polymorphous. He argued that any notion of power is meaningless without identifying multiple parties and a specific context, that all social relations are both enabling and constraining and thus characterised by shifting balances of power. Consequently interdependence and relative autonomy, rather than (medical) dominance, should be of primary interest to those studying human relations (Dunning and Hughes 2013).

We do not wish to claim that the professional dynamics we explore here are universal and, as we discuss, it is important to stress that there are limits to the degree of autonomy physiotherapy experience relative to medicine. However, through a UK-based study of elite

sports medicine we argue that the relatively high degree of autonomy physiotherapists experience is a consequence of the relatively close alignment of both the philosophies which have traditionally defined the broader physiotherapy profession and the more recently identified competencies of sports physiotherapists in particular, with the treatment ideology dominant in the particular practice setting of sport. Within sport, physiotherapists experience enhanced opportunities to engage in experiential learning, blur the boundary between therapy and training, and are able to foster relatively high degrees of trust and mutuality. Ultimately they are seen to contribute towards problem solving. Thus, the paper advances knowledge by identifying the ways in which sports physiotherapists have utilised their broad skill-set to carve out a significant role in the sport and exercise medicine context at the same time as understanding the barriers that prevent them from achieving greater autonomy.

#### Methods

Data for this paper are derived from a broader study of the professionalisation of sports medicine in the UK, which examined the impact of policy change on doctors and physiotherapists working practices in sport (see Author 2010). As part of that study, fourteen of the 34 physiotherapists serving on the British Olympic Association's Physiotherapy Forum volunteered to be interviewed. All interviewees were appointed as representatives of the national governing bodies of Olympic sports and worked with Olympic athletes. They self-selected for interview when responding to a questionnaire emailed to all forum members. All respondents were members of the Association of Chartered Physiotherapists in sports medicine (ACPSM), all had considerable experience of practicing in sport, and many (45%) had sports-specific postgraduate qualifications (see Table 1). In order to explore the professional relations in this practicing

context, these data are augmented by data derived from interviews with fourteen of the 35 doctors who are members of the parallel BOA Medical Committee, recruited using an identical method (see Table 2). Both groups were asked to consider their relationships both within and without their professions and thus their reflections are pertinent to this discussion.

#### Tables 1 and 2 about here

Semi-structured interviews were chosen as they allowed interviewees to discuss their working practice in detail. The interview schedules were informed by issues discussed in previous literature (e.g. Malcolm 2006; Theberge 2008), and examined: physiotherapists' (and doctors') relationships with other clinicians, coaches and athletes; contrasts in the management of athletes' pain and injury during routine training and major competitions; reflections on the development of sports-specific medical specialisms; and the changing medical provision for elite athletes. However, as neither author is a physiotherapist, an advantage of choosing semi-structured interviews was that it enabled the focus of the research to be structured by insiders' understandings of the work practice.

After securing relevant ethical clearance, the second author conducted all interviews. Interviews ranged between 35 and 90 minutes and were transcribed in full. Interviews were conducted 3-4 months prior to the 2012 Summer Olympic Games. The interviewer's professional identity was declared before each interview (e.g. doctoral researcher) to provide interviewees with assurances that no affiliations to organisations of interest or possible conflict to those of the

respondents existed. Respondents signed an informed consent form before each interview commenced.

Interviews were analysed using thematic coding (Gibbs 2007), and the second author undertook the principal analysis. Emergent themes and sub-themes were identified according to the degree to which they resonated with ideas expressed in the established literature. Extracts from the interview transcripts were placed in separate word documents for reference during the course of data-collection and after completion. Further analytical notes were made after each interview in order to connect the emerging themes to the existing literature and theoretical concepts which helped to further regulate and develop the interview questions and enabled the researcher to ask additional questions in relation to these central themes. Respondents' gender and sport affiliations are not reported to preserve anonymity. This process of creating a 'logical, traceable and documented' (Sparkes and Smith 2014, p. 179) audit trail ensured that research dependability - the consistency of qualitative data over time – was established. Following Letts et al. (2007), an appropriate distance from the data was maintained so as to ensure research quality and credibility. While the second author assumed primary responsibility for data analysis, the first author examined transcripts from each interview and each authors' ideas about common themes were compared and discussed. Any conflicting interpretation were addressed so as to more precisely represent the data.

The following discussion analyses three central themes. First, we outline the centrality of the physiotherapist in the context of MDTs that provide sports healthcare and the ways in which physiotherapists establish their relative autonomy both in terms of working alongside other professions and fulfilling (additional) non-medical roles that facilitate the functioning of the team. Second, we provide a critical analysis of the limits of physiotherapists' autonomy by way of comparison to the roles of doctors in this context. Third, we identify the foundations of sports physiotherapists' relative autonomy by describing those elements of their practice traditions and competencies – time, experiential learning, fostering mutuality, etc. - that makes them 'useful' to their clients and enables them to solve athletes' problems.

#### The Centrality of Sports Physiotherapists to the Sports Medicine Team

As the work reviewed above had indicated (Malcolm 2006; Theberge 2008), relations between physiotherapists and physicians were found to be largely collaborative and correspond with the notion that, for MDTs to function, a climate of 'cooperation and collaboration needs to be actively fostered' (Reid *et al.* 2004, p. 205). Physiotherapists argued that the two professions 'have a very good working relationship ... we trust each other' and noted that 'you rarely have conflict'. Accordingly, in this practice context, there were noted professional benefits to working in MDTs such as sharing of knowledge and responsibility (Suddick and De Souza 2006). For instance one doctor shared that, 'We work very closely with physiotherapists ... I think it's very important to have a pretty free and open dialogue there for the good of the [athlete]'.

As well as noting the collaborative working relations, doctors in the study remarked on the significance of the relative expertise of physiotherapists in the MDT and the notion that physiotherapists' more regular involvement with athletes – in practice they were frequently 'first practitioners' (Bury and Stokes 2013) meant medical dominance was often challenged. Referring to the typical practice of working alongside physiotherapists and other paramedical staff and thus maintaining the collaborative relationships and joint decision making which are important to the smooth functioning of MDTs (Coopman 2001), one doctor stated that it was a 'good thing ...

having trainees and physiotherapists sitting with you ... because they will challenge you'. Reflecting the role of dissemination in the competencies of sports physiotherapy (Bulley and Donaghy 2005a; Reinking *et al.* 2014), another doctor, when asked about their relationship with physiotherapists responded:

Because I work with an excellent physiotherapist, often I'll spend time watching him ... because he is just so good so he is an education. So I nick as much as I can from him. This quote demonstrates the potential for physiotherapists to act as innovators and professional leaders and is thus indicative of professional relations that are not a unilinear hierarchy but characterised by more subtle and diffuse power relations (Elias 1978). Indeed, the clinical autonomy of sports physiotherapists was such that another doctor stated, 'in a way you kind of get a bit de-skilled' suggesting that the breadth of physiotherapy treatment had generated feelings of redundancy for this doctor.

As Reid *et al.* (2004) argue that multitasking in sports-related MDTs is both a financial necessity and an important aspect of group bonding. Like previous research (Malcolm 2006; Theberge 2009b) this study found that healthcare professionals expanded their roles to encompass a range of additional, non-treatment, related functions such as driving the team's vehicles. One physiotherapist noted that,

Sometimes my job is to carry the [equipment] ... into the hotel, to wash the floor, to organise. My last job away was to ... communicate with the girls on the desk at reception about what we were having for breakfast.

Physiotherapists regarded these 'additional' duties – driver, labourer, cleaner, manager – as a natural extension of their involvement in a team assembled to maximise athletic performance. Indeed, these ad-hoc duties served to centrally locate physiotherapists as agents in the successful

sports team. While not a definitive list these roles are indicative of the breadth of sports physiotherapists' work and the expectation of physiotherapists to be relatively flexible in their contribution (Theberge 2009a). Executing such roles enabled physiotherapists to be, and to be seen to be, integral to the smooth functioning of the group (Parry 2009; Jensen *et al.* 2000). The willingness to engage in such duties is an indication of the relative importance physiotherapists attach to being existentially secure in a socially supportive group compared to maintaining an occupational boundary based, for instance, on medical and non-medical distinctions (see Malcolm 2009 for similar examples), but their work flexibility and, specifically, undertaking duties that were beyond their core professional competencies, can be seen as driven by a desire to 'solve problems' (Jensen *et al.* 2000) by contributing to the broader team's functioning. The professional identities of sports physiotherapists rested, therefore, on 'doing something' for their patient (Thornquist 1995).

Work flexibility encompassed tasks which blurred the occupational boundary with medicine. Whilst physiotherapists argued that they would largely initiate and lead with respect to: a) rehabilitation; b) the recommendation of restorative exercise; and c) assessing recovery, they defined cases of prescription (the authorisation to issue controlled medical substances to a patient), injection and making 'final diagnoses' as the domain of doctors. There was a clear emphasis on 'maintain[ing] independence in their decision-making' (Bulley and Donaghy 2005a, p.106; Reinking *et al.* 2014) while respecting jurisdictional sensitivities in the MDT (Reid *et al.* 2004). When furthering his/her explanation that there were differences in doctors and physiotherapists' professional roles and approaches to patient examination, one physiotherapist succinctly stated 'it's a case of they are leading in their area and we are in ours'. Such a perception is indicative of the shifting balances of power in typical working practices where

professionals assume responsibility for different skills as opposed to one profession dominating another (Sandstrom 2007).

Interviews confirmed the suggestion in the extant literature that sports physiotherapists are particularly autonomous when travelling to competitions or training camps, especially overseas (Theberge 2009b). Describing their expanded responsibilities when away from home, one physiotherapist said:

Normally when we go on trips we have never had enough money to send a doctor so I have just kind of, I have to do everything. I'm the doctor, I'm the physiotherapist, I'm the whatever.

In saying this, the physiotherapist revealed both the conventional hierarchy of healthcare professions (implied by doctor-physiotherapist-whatever ranking), but also the contextual pressures which enable (and indeed push) physiotherapists to be 'professional leaders' (Bulley and Donaghy 2005a; Reinking *et al.* 2014) and therefore (potentially) cross into the traditional domains of medicine in service delivery. Significantly, given their status as the clinical expert on international trips, physiotherapists undertake a range of acute interventions, including exercising clinical judgement to make diagnoses (Bulley and Donaghy 2005a; Reinking *et al.* 2014) and, further, to help alleviate athletes' injury or illness concerns. Data reveal therefore, the modification of traditional professional relations in medicine through a high degree of both clinical and practice autonomy (Øvretveit 1985; Bury and Stokes 2013), with physiotherapists largely responsible for the organisation, management and delivery of healthcare to athletes in particular contexts.

#### The Limits of Sports Physiotherapists' Autonomy

Despite the centrality of sports physiotherapists to MDTs, and the largely cooperative and supportive relationships within them, the traditions of medical dominance and in particular doctors' access to the broader network of medical resources, meant that physiotherapists' relative autonomy was limited by the structural aspects of professional relations. Comparing the respective professions, one physiotherapist said:

I think they [doctors] are a bit more, well aloof. I suppose they [athletes] look at a doctor as anybody would look at a doctor – they are God in a lot of people's eyes aren't they. Physiotherapists primarily attributed this status to the medical professions' ability to access information from other experts (e.g. surgeons) and facilitate further investigative procedures; essentially their gatekeeping of a variety of medical treatments. Thus, these data indicate that a traditional view of medical hierarchy including access to resources and gatekeeping allowed doctors to limit the autonomy of physiotherapists (Sandstrom, 2007; Bury and Stokes, 2013). Consequently physiotherapists emphasised the importance of maintaining good working relationships with doctors because the latter could enable access to the resources required for solving patients' problems. Describing the importance of having doctors 'on side' to enable them to have access to their networks of relations, one physiotherapist stated:

Well, they are always the important ones to keep together ... you know they are the ones that would be doing your MRIs, they're the ones who will be referring to consultant opinions.

Thus, while appropriate referral is cited as a professional competence of sports physiotherapy (Bulley and Donaghy 2005a, p. 106), the practical implications of this often augment medical dominance.

Reliance on doctors was, somewhat ironically, most explicit when teams travelled and

physiotherapists nominally experienced the greatest autonomy. Despite having a relatively free rein over practice in this setting, it was normal to maintain regular telephone contact with the team doctor. Consequently, while sports physiotherapists were cognisant that communication with other medical personnel was fundamental to competence (Bulley and Donaghy 2005a; Reinking *et al.* 2014), in doing so they made an important concession to the traditions of medical dominance (Sandstrom 2007). As one doctor noted:

They will phone me and I'll advise them on the phone quite a lot ... the physiotherapist does a lot of the medical things as well and he or she knows when to phone me.

In many cases telephone contact with a team doctor was in relation to prescription. Whilst the ability to prescribe without external influence has been described as 'at the heart of the GP's clinical autonomy' (Weiss and Fitzpatrick 1997, p. 299), and while the right to prescribe has extended to include physiotherapy – in the UK, usually by way of a 'standing order' authorised by a licensed prescriber (see Medicines and Healthcare products Regulatory Agency or MHRA) – none of those interviewed had taken on the role of 'supplementary prescribers'. But in sport, the close contact between athletes and physiotherapists, and their physical distance from doctors, meant physiotherapists would often describe the pharmacological treatment which, in their view, the athlete would find beneficial. Thus while essentially directing doctors to prescribe particular medicines, through the 'advice-seeking' mechanism which predominated in this context, physiotherapists ultimately exhibited a form of professional deference, although it is difficult to ascertain if this deference was impelled by macroprofessional power relations, contextual exigencies of minimising conflict in the MDT or a combination of both.

A respectful distance to medicine was shown in other situations and illustrated

physiotherapists' awareness of their own vulnerability when blurring professional boundaries. In this regard, physiotherapists expressed a 'desire to have their boundary incursions legitimated by doctors' (Malcolm and Scott 2011, p. 519). The following physiotherapist described how s/he found the doctor's contribution particularly valuable when faced with a 'serious' injury. S/he explained:

I would make the call if I'm on my own if there is nobody else to do it, but if there is a doctor there and it is a serious injury it is always nice to have a discussion and to make a decision between the two of you.

Thus physiotherapists' desire to have diagnoses and treatment programmes supported by a doctor, and their attitudes towards referrals and prescription, revealed a consciousness of the importance of understanding the limitations of professional boundary incursions that are structurally-recognised in the Health and Care Professions Council's *Standards of Proficiency* (HCPC 2013) and agency-operated in successful MDTs (Reid *et al.* 2004). Thus, there are both contemporary practical realities and historical legacies which limit the relative autonomy of sports physiotherapists.

#### The Foundations of Sports Physiotherapists' Relative Autonomy

Previous analyses have suggested that 'negotiations over professional work in [elite sport healthcare] are shaped by a specific feature of practice in this setting, the emphasis on optimising performance' (Theberge 2009a, p. 265). It is also worthy of note that the structural make-up of the practice setting that clinicians are working in (in this instance, UK elite sport) necessarily affects the relative autonomy of professions. In this regard, National Lottery funding via UK Sport's *World Class Performance Programme* and services provided by the HCIS may directly

affect the integration and resulting relative autonomy of sports healthcare providers. The more central role that physiotherapists play in the complete treatment process necessarily impacts upon those services that organisations are keen to invest in, and/or see as offering the greatest value for money (see Theberge, 2009; McEwan and Taylor, 2010). Specifically, physiotherapists' greater integration and work role flexibility enables them to readily respond to the demands of the practice setting. The ability to centrally contribute to the performance goals of sport makes physiotherapists particularly useful in the eyes of both their consumer-patients (athletes) and their employers (coaches/managers) (Malcolm 2006).

However, to explain the relative equality between these two professional groups in the context of sport, and the basis upon which professional jurisdictional boundary blurring occurs, one also needs to locate the specific roles of sports physiotherapists within the broader context of physiotherapy practice. Close physical contact and experiential learning foster physiotherapist-patient mutuality, locates the physiotherapist as integral to rehabilitation, and therefore physiotherapy as inherent to performance and enhancement. It leads to trusting and collaborative healthcare relations (Parry 2009; Jensen *et al.* 2000), helps physiotherapists avoid the problems associated with treatment failure (Wiles *et al.* 2004), and enables sports physiotherapists to be seen to be equipped to solve patients' problems. Each of these is more or less explicitly recognised in the competences proscribed for sports physiotherapists (Bulley and Donaghy 2005a; Reinking *et al.* 2014). Thus, the current data are the first to demonstrate how the practice traditions and competencies of sports physiotherapy contribute to the relative autonomy of practitioners.

Central to the ability of physiotherapists to solve the problems of their patients is the time they are able to spend treating athletes and, related to this, their integration into the team environment (Parry 2005). Sports physiotherapists were particularly conscious of this, typically describing themselves as 'completely immersed' in their practice environment. Having the time to repeatedly work with athletes and thus scope to reflect on practice, skills and knowledge (Bulley and Donaghy 2005a) is described as one of the most enjoyable features of working in sport. According to one physiotherapist:

I like that because you can get really good results because you can spend time, you can get somebody better and you can work out an ongoing training programme, their treatment plan.

Many physiotherapists contrasted their experiences in sport from their experiences of working in public healthcare where the regimentation of time was a source of frustration. Confined to fifteen minutes per patient one reflected that:

There is no "hands on", there is no advice about the condition, just some exercises. They [the NHS] seem to be wasting their time as it's based around this time limit.

In contrast, the structure of physiotherapists' work in sports MDTs meant that they were able to be involved in every stage of the treatment process – injury prevention, rehabilitation and performance enhancement rather than simply acute intervention - which also meant getting to know their athletes' specific injury histories, patterns of recovery, etc. A physiotherapist explicitly compared the roles of the respective professions in this regard:

The doctor will come in and *help* with the diagnosis but as far as treatment goes, spending time with the athlete is central and so the physiotherapist tends to spend a lot more time with the athlete (emphasis added).

In contrast to the difficulties which physiotherapists and patients more generally experience in relation to the withdrawal of therapy upon discharge (Wiles *et al.* 2004) working in the context

of sport meant that, 'you can't actually discharge anybody! You're working with a group of people and you're seeing them over and over again'.

Through the elision of training and treatment interviewees revealed the synergy they perceived between their healthcare work and the performance orientation of sport. Within sports physiotherapy considerable value is attached to performance outcomes (Parry 2005; Theberge, 2009a) which, in turn, are reliant on the healthcare provider being 'involved in every step'. A physiotherapist described a typical treatment scenario:

What you might do is get someone in the first or second stage [of injury] and work with a coach in the third stage. You could have them for the first stage and then hand them on to strength and conditioning in the second stage and then pick them back up in the final stage ... Then you're involved in the injuries, rehabilitation, injury prevention and then out in the field when they are competing.

Another more succinctly noted, 'if you can get out and involved in the field and be at competitions then I think that really gives you the whole package'. Thus through these multiple stages of interaction the distinction between treatment and performance, between healthcare and sport, becomes blurred. Given the central mission of sports teams, this serves to enhance the role of physiotherapists in particular.

One of the key benefits which physiotherapists derived from spending extended time with an athlete was that it enabled knowledge to continually and organically develop. Doctors also recognised this:

The physiotherapists will know an awful lot more about what is going on with athletes because they have the opportunity to be out there seeing what is going on and they get talked to a lot more.

Experiential learning not only enhanced the physiotherapist's knowledge base but it formed the basis of their professional boundary claims. Implicitly recognising that this situation had implications for medical dominance another doctor commented:

I'm the lead medical person but the thing is the physiotherapist is full time and I'm not so they are the ones that will be there seeing the players every day.

Thus, while it was likely that doctors assumed lead or managerial positions within MDTs due to the historical status of their profession, they recognised that physiotherapists' typical roles as the first port of call for pain, injury and illness issues (Bury and Stokes 2013) provided them with opportunities for enhanced practice autonomy. A third doctor argued that physiotherapists' experiential knowledge meant that, 'you have to kind of have them [physiotherapists] in and give them respect and work with them closely'.

In a context where injuries are frequent, and athlete-patients require on-going management rather than 'cure' (Malcolm 2006), the relatively holistic character of physiotherapy treatment is particularly valued. Physiotherapists placed considerable emphasis on their role as 'advisor' (Bulley and Donaghy 2005a), encouraging patient-athletes to take responsibility for their own health (Wiles *et al.* 2004), and in turn this enhanced the status of physiotherapists relative to doctors in the sports context. Preventative strategies inform athletes' everyday lives, from training to nutrition, or 'teaching them how to look after themselves' as one physiotherapist described it. Another physiotherapist highlighted the interrelationship between preventative care and self-help:

You do all of the preventative measures like teaching how to warm up, stretch, keep themselves going, what are the right things to eat. So, you are teaching them all of the time [about] what they are doing with themselves you hope.

This aspect of sports physiotherapy competence served as a point of distinction from doctors in the sports.

The scope of physiotherapy practice, both in terms of time and range of interventions, provided physiotherapists with opportunities to assert their usefulness (relative to doctors) and thus foster mutuality with patients. Reflecting physiotherapy's tradition (Thornquist 1995), the patient's evaluation of the effectiveness of treatment was deemed central. As one physiotherapist stated,

You rely on your hands speaking for you a lot of the time. Athletes can tell when you put your hands on them whether you know what you are doing or not. They can tell. If you can convince them from the first time that you put your hands onto somebody that you know what you are doing then half of your job is done already.

Sports physiotherapists build on these traditions in the identification of 'sensitive communication' as a core competence (Bulley and Donaghy 2005a, p. 106).

These factors culminated in the view that physiotherapists were fundamental to the recovery process and therefore solved the fundamental problem which elite athletes face – (injury-)impaired performance. Physiotherapists perceived there to be a strong emotional element to injury and, to meet this treatment demand, talked of the ways in which more *interdependent relationships* with athletes were established. In addition to their roles as team facilitators (e.g. driving the team vehicle, organising meals), a number of interviewees explained how athletes became attuned to the 'problem solving' ethos of physiotherapy. One physiotherapist explained how:

There is a lot of psychological work with it as well, talking them around to the point where you are with them all the time. You gain their confidence. You sort out all of their

other problems as well.

Similarly, another physiotherapist stated: 'it is very important so they know that you are always going to be there for them as an athlete, as a patient'. Moreover, a number of physiotherapists described how athletes would often see them about problems unrelated to their training or performance. Thus at the heart of sports physiotherapists' behaviour 'lies understanding of the sensitivity towards the implications of injury for the athlete' (Bulley and Donaghy 2005a, p. 105).

In contrast to the short and discreet periods of consultation athletes tend to have with doctors, the extended athlete-physiotherapist interaction enables strong relationships to develop. Comparing the rapport between doctors and athletes and physiotherapists and athletes, one physiotherapist argued that '[we] definitely have a closer relationship because we see them more frequently. I think they would be more likely to discuss things with us than they would do with doctors'. While studies have shown how patients often perceive doctors to be less approachable than other healthcare providers (e.g. Cooper 2011), sports physiotherapists appear to epitomise this process, particularly when the athlete is in competition. One physiotherapist described how s/he was 'seen as a confidant' by athletes. Another described their involvement with athletes in the following way: 'Oh you are just with them all of the time. Short of sleeping with them really!'. The physiotherapist went on to explain that,

You have dinner together and you are very much one of the team and that is the same with training or anything ... Most of the treatments are done back at the hotel or wherever but I would always be there. So you are with them the entire time.

Athletes' reliance on physiotherapists to attend and sometimes decipher their consultations with doctors was symptomatic of the degree to which sports physiotherapists could demonstrate

usefulness relative to medicine through the fostering of mutually cooperative relations with athletes as well as indication that doctors' can lack an ability to communicate effectively with injured athletes. One physiotherapist stated, 'if they want me to go to a doctor's consultation then I'll go so that I can explain to them what the doctor is saying'. Describing a similar approach, another physiotherapist recalled how s/he had decided that it was particularly valuable to attend meetings between athletes and specialists. S/he noted that:

Athletes often go and see the doctor and come back to me with "He said this, this and this. What did he mean? What's going on?" That's when you have got to sit down and hope that they have heard.

By being present at the consultation the physiotherapist could not only gain additional knowledge, but could ameliorate any existential uncertainties (Malcolm 2009) the athlete experienced. The physiotherapist therefore became not only an advisor but also a mediator between the patient and other healthcare providers.

In cultivating such close and cooperative relations with patient-athletes, physiotherapists were able to insulate themselves from the key threat to professional identity, namely treatment failure. Physiotherapists described how, once trust had been established, athletes would continually return to them as their 'first port of call' for treatment. This was exemplified in one physiotherapist's account of how they overcame the potentially damaging consequences of a serious misdiagnosis:

I have said things to athletes that I probably shouldn't have said and I have made diagnoses that were wrong. I have bet my reputation that there was nothing wrong with an athlete's knee and he ended up having an ACL rupture! ... Ultimately, if an athlete keeps their faith in you and ... they still come back to you, then it means you are doing

something. Because if you weren't good at those other things they would walk away because clinically you have made the biggest mistake and the biggest call of your life. But for some reason they come back. Why? That's the other bits. You can't always quantify it.

Gaining the trust and confidence of the patient enabled this physiotherapist to sustain a working relationship in the face of pronounced treatment failure (Wiles *et al.* 2004).

#### **Conclusion**

The influence of physiotherapists in sports MDTs is fostered through close physical contact with athlete-patients and extended periods of exposure not only in relation to treatment but while performing a variety of other, performance-oriented functions. This enables trusting relations which augment physiotherapists' clinical and practice autonomy. Relative status is not solely (or even particularly) dependent upon doctors and physiotherapists' respective clinical knowledge, but on client-patient evaluation. Significant in this regard are, in the words of one physiotherapist, 'the other bits' that you 'can't always quantify'.

Following a theoretical framework informed by the work of Elias, the analysis of elite sports physiotherapy highlights how the interchange between macro or structural factors such as traditional treatment practices, identified professional competencies and historically contoured inter-professional relations, and micro-social relations stemming from particular practice settings, determines the relative degrees of influence of different healthcare providers. Inherent to this is the mobilisation of a variety of different forms of power: state-legitimated practice domains (e.g. prescription); referral networks; charismatic authority derived from occupational association; perceived practical usefulness; emotional connection; trust. The rhetorical strategies

used by professional groups in jurisdictional legitimation are fundamentally relational. They are contoured by both a professions' treatment practice and location in the broader division of healthcare labour and thus, for instance, in other elite sport contexts chiropractors appear to benefit from making competing claims. Notably, in the context of elite sport, the ability to integrate therapeutic practice with aspects of performance-related athletic training is a key determinant of influence.

As noted earlier, the place of physiotherapy within sports medicine varies cross-culturally and the expanded jurisdictional roles of sports physiotherapists reported here may be specific to UK elite sport, influenced by the relatively recent 'professionalisation' of sports medicine in this context (Malcolm and Scott 2011). However, the research discussed here provides a unique insight into professional relations in healthcare, the functioning of sports healthcare MDTs, and the factors which will enable and constrain the future scope of physiotherapy practice. It remains to be seen how a wider exercising public respond to the practice traditions and problem solving ethos of sports physiotherapists.

#### References

- APA., 2011. Physiotherapy in Australia [online]. Available from:

  <a href="http://www.physiotherapy.asn.au/index.php/careers/overview">http://www.physiotherapy.asn.au/index.php/careers/overview</a> [Accessed 16th June 2013].
- Bundon, A. and Clarke, L., 2012. 'Keeping us from Breaking': Elite athletes' access to and use of complementary and alternative medicine. *Qualitative Research in Sport, Exercise and Health*, doi: 10.1080/2159676X.2012.712986.
- Bulley, C. and Donghy, M., 2005a. Sports physiotherapy competencies: The first step towards a common platform for specialist professional recognition. *Physical Therapy in Sport*, 6, 103-108.
- Bulley, C. and Donghy, M., 2005b. Sports physiotherapy standards: A minimum threshold of performance. *Physical Therapy in Sport*, 6, 201-207.
- Bury, T., and Stokes, E., 2013. A Global View of Direct Access and Patient Self-Referral to Physical Therapy: Implications for the Profession. *Physical Therapy*, 80, 28-43
- Cooper, R., Bissell, P., Ward, P., Murphy, E., Anderson, C., Avery, T., James, V., Lymn, J., Guillaume, L., Hutchinson, A. and Ratcliffe, J., 2011. Further challenges to medical dominance? The case of nurse and pharmacist supplementary prescribing, *Health*, 16 (2), 115-33.
- Coopman, S.J., 2001. Democracy, performance, and outcomes in interdisciplinary health care teams. *Journal of Business Communication*, 37, 261-286
- CSP, 2008. Charting the Future of Physiotherapy. London: Chartered Society of Physiotherapy.
- Dunning, E. and Hughes, J. 2013. Norbert Elias and Modern Sociology: Knowledge,

- Interdependence, Power, Process. London: Bloomsbury.
- Elias, N. 1978. What is Sociology? London. Hutchison
- Gibbs, G., 2007. Analysing Qualitative Data. London: Sage
- HCPC 2013. *Standards of Proficiency: Physiotherapists*. London: Health and Care Professions Council.
- Jensen, G., Gwyer, J., Shephard, K. and Hack, L. 2000. Expert Practice in Physical Therapy, *Physical Therapy*, 80 (1), 28-43.
- Larkin, G., 1983. Occupational Monopoly and Modern Medicine. London: Tavistock.
- Letts, L., Wilkins, S., Law, M., Stewart, D., Bosch, J. and Westmorland, M. 2007. Guidelines for Critical Review Form; *Qualitative Studies* (Version 2.0). Available from:

  <a href="http://www.srs-mcmaster.ca/Portals/20/pdf/ebp/qualguidelines\_version2.0.pdf">http://www.srs-mcmaster.ca/Portals/20/pdf/ebp/qualguidelines\_version2.0.pdf</a> (accessed Aug 6th, 2014)
- Malcolm, D., 2006. Unprofessional practice? The status and power of sports physicians. *Sociology of Sport Journal*, 23 (4), 376-395.
- Malcolm, D., 2009. Medical uncertainty and clinician-athlete relations: the management of concussion injuries in rugby union. *Sociology of Sport Journal*, 26 (2), 191-210.
- Malcolm, D. and Scott, A., 2011. Professional relations in elite sport healthcare: workplace responses to organisational change. *Social Science and Medicine*, 72 (4), 513-520.
- McEwan, I. and Taylor, W., 2010. 'When do I get to run on with the magic sponge?' The twin illusions of meritocracy and democracy in the professions of sports medicine and physiotherapy. *Qualitative Research in Sport, Exercise and Health*, 2 (1), 77-91.
- Medicines and Healthcare products Regulatory Agency (MHRA). Supplementary Prescribing.

  Available from:

- http://www.mhra.gov.uk (accessed Aug 6<sup>th</sup>, 2014).
- Nicholls, D.A. and Cheek, J., 2006. Physiotherapy and the shadow of prostitution: the Society of Trained Masseuses and the massage scandals of 1894. *Social Science and Medicine*, 62, 2236-2348.
- Øvretveit, J., 1985. Medical dominance and the development of professional autonomy in physiotherapy. *Sociology of Health and Illness*, 7 (1), 76-93.
- Parry, R., 2005. A video analysis of how physiotherapists communicate with patients about errors of performance: insights for practice and policy, *Physiotherapy*, 91 (4), 204-214
- Parry, R., 2009. Practitioners' accounts for treatment actions and recommendations in physiotherapy: when do they occur, how are they structured, what do they do? *Sociology of Health and Illness*, 31 (6), 835-853.
- Reid, C. Stewart, E., and Thorne, G. 2004. Multidisciplinary sport science teams in elite sport: comprehensive servicing or conflict and confusion? *The Sports Psychologist*, 18, 204-217
- Reinking, M., Rosenthal, M., Weber, M., Mulligan, E.. 2014. Sports Physical Therapy: What Makes Us Unique? Section Meeting of Sports Physical Therapy Section. Available from:

  <a href="http://www.spts.org/Assets/files/What%Makes%Us%20Unique.pdf">http://www.spts.org/Assets/files/What%Makes%Us%20Unique.pdf</a> (accessed August 1<sup>st</sup>, 2014)</a>
- Sandstrom, R., 2007. The Meanings of Autonomy for Physical Therapy. *Physical Therapy*, 87, 98-106
- Sparkes, A.C. and Smith, B., 2014. *Qualitative Research Methods in Sport, Exercise and Health:*From Process to Product. London: Routledge
- Suckley, J. 2012. Core Clinical Competencies for Extended-Scope Physiotherapists Working in Musculoskeletal (MSK) Interface Clinics Based in Primary Care: A Delphi Consensus

- Study, Professional Doctrate, University of Salford, UK
- Suddick, K.M., and De Souza, L., 2006. Therapists' experiences and perceptions of teamwork in neurological rehabilitation: reasoning behind the team approach, structure and composition of the team and teamworking processes. *Physiotherapy Research International*, 11 (2), 72-83
- Swisher, L. and Page, C. 2005 Professionalism in Physical Therapy: History, Practice and Development. St Louis: Elsevier
- Theberge, N., 2008. The integration of chiropractors into healthcare teams: a case study from sports medicine. *Sociology of Health and Illness*, 30 (1), 19-34.
- Theberge, N., 2009a. 'We have all the bases covered'. Constructions of professional boundaries in sport medicine. *International Review for the Sociology of Sport*, 44 (2), 265-282.
- Theberge, N., 2009b. Professional identities and the practice of sport medicine in Canada: a comparative analysis of two sporting contexts. *In:* J. Harris. and A. Parker, eds. *Sport and Social Identities*. Basingstoke: Palgrave Macmillan.
- Thornquist, E., 1994. Profession and life: separate worlds. *Social Science and Medicine*, 39 (5), 701-713.
- Thornquist, E., 1995. Musculoskeletal suffering: diagnosis and a variant view. *Sociology of Health and Illness*, 17 (2), 166-192.
- Turner, B. 1987. Medical Power and Social Knowledge. London: Sage.
- Weiss, R. and Fitzpatrick, R., 1997. Challenges to medicine: the case of prescribing. *Sociology of Health and Illness*, 19 (3), 297-327.
- Wiles, R., Ashburn, A., Payne, S. and Murphy, C., 2004. Discharge from physiotherapy

following stroke: the management of patient disappointment. *Social Science and Medicine*, 59, 1263-1273.

**Table 1 Physiotherapy Sample Details** 

Work setting	Years of practice in sport	Postgraduate qualifications
Team	18	None
Multisport	15	None
Team sport	5	PG Diploma Acupuncture
Multisport	12	None
Management	8	None
Team	15	Manipulation therapy
Individual	7	MSc rehabilitation
Team	13	MSc sports science
Individual	17	MSc sports physiotherapy
Individual	10	None
Individual	8	Yes, not specified
Individual	20	None
Multisport	8	MSc sports injury
Multisport	6	MSc sports injury

**Table 2 Doctor Sample Details** 

Work setting	Years of practice in sport	Postgraduate qualifications
Individual	17	MSc Sport and Exercise Medicine
Multisport	10	MSc Sport and Exercise Medicine
Individual	3	None
Individual	1	MSc Sport and Exercise Medicine
Multisport	4	PG Diploma Sports Medicine
Individual	5	None
Multisport	27	None
Individual	12	None
Individual	20	Yes, not specified
Individual	7	None
Team	10	PG Diploma Sports Medicine
Multisport	7	MSc Sport and Exercise Medicine
Individual	6	PG Diploma Sports Medicine
Multisport	7	MSc Sport and Exercise Medicine

Notes

<sup>1</sup> The ACPSM has recently changed its name to the Association of Chartered Physiotherapists in Sport and Exercise Medicine, thus mirroring the name change from the British Association of Sport and Medicine, to the British Association of Sport and Exercise Medicine, undergone in 1999.