

# A Taxonomy of Expertise in Football Performance Support Services: Supporting Accreditation, Clear Scope and Auditing

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Sport scientist | Accreditation | Clinical governance | Multidisciplinary team | Performance support services

## Headline

Although professional football employs sports scientists, analysts and conditioning staff, it lacks a unified method for defining competencies or decision-making authority. This article describes a two-dimensional taxonomic framework that combines depth of expertise with scope of practice. The framework clearly links practitioner levels to decision rights and is supported by accreditation and audits. Its primary objectives are to improve recruitment, supervision, and licensing processes, and to clearly distinguish the medical and performance domains, a distinction that has historically remained ambiguous.

Over the past two decades, performance support teams in professional football have expanded significantly. High-performance organisations now frequently include multidisciplinary groups comprising physiotherapists, sports scientists, conditioning coaches, psychologists, nutritionists, analysts, and advisors. These teams are designed to optimise athlete performance (1,2). A persistent challenge is the clear definition of roles and the facilitation of collaboration to prevent fragmented practice (3,4,5). At present, there is no consensus on the definition of competence for applied sport science practitioners or on the criteria that external bodies should use to assess capability (6,7). The physiotherapy profession in the United Kingdom addressed these issues three decades ago by registering with the Health and Care Professions Council (HCPC), which confers legal recognition and sets chartered standards for physiotherapists and clinicians. In contrast, sport and exercise science continues to rely on overlapping job titles and informal professional networks. Proficiency or suitability for a role goes beyond credentials or accreditations and requires a demonstrable impact on performance (2,8). Additionally, effective performance support team members are recognised for their role in both achieving results and fostering positive team relationships (9), while also maintaining standards in an elite and highly demanding environment.

Consider a professional football club that is looking to recruit a sports scientist. Such a club may attract a diverse array of candidates, including MSc graduates with limited practical experience, experienced practitioners with multiple accreditations, and former players equipped with both academic credentials and coaching licences. Although all candidates may meet formal qualification criteria, their professional competencies can vary considerably. Furthermore, appointed sports scientists may be involved in decision-making regarding training load management, player readiness assessments, and return-to-play protocols, thereby highlighting potential challenges in recruitment and retention. This also points to the continuing difficulties of juggling technical expertise with academic qualifications.

## Aim

This paper proposes a taxonomy of expertise, presenting a structured framework that links competence and decision authority to qualifications and accreditation, defined as formal recognition by a professional body of knowledge and skills. The primary aim is to improve audit processes by systematically reviewing activities and decisions. This approach is not intended to impose additional barriers, as existing systems already impose such constraints through professional networks and reputation. Instead, it supports the creation of clear, defensible standards determined by objective organisations rather than by practitioners themselves.

## The Taxonomy

In this taxonomy (Figure 1), expertise is categorised along two axes. The vertical axis represents the depth of practice, which is based on practitioner oversight and experience. It comprises four categories: Tier 1 (Supervised), Tier 2 (Competent), Tier 3 (Proficient), and Tier 4 (Expert/Lead). The horizontal axis illustrates the scope of decision-making—the types of decisions practitioners are authorised to make. This encompasses Data & Monitoring (the collection and management of data), Interpretation & Insight (the analysis of data and the derivation of conclusions), and Intervention Design (the development of plans to enhance performance). Multidisciplinary Decision Rights pertain to participation in decision-making processes that require input from multiple specialities.

This two-axis structure represents a linear hierarchy. In current job titles, higher seniority corresponds to greater authority. For example, the grid indicates that a Tier 4 data analyst is considered an expert but is not authorised to make return-to-play decisions. A Tier 2 sport scientist may design interventions within approved protocols but cannot independently override them. The fourth column, Multidisciplinary Decision Rights, is reserved for Tier 3 or higher and requires agreement from the relevant lead. Tier classifications correspond to career stages: Tier 1 includes pre-accreditation staff or early-career MSc graduates working under supervision; Tier 2 encompasses accredited professionals operating independently within protocols; Tier 3 denotes proficiency, typically with more than five years of experience and protocol design responsibilities; and Tier 4 involves leading the discipline, setting strategy and supervising Tiers 1 and 2.

The classification draws on the Dreyfus and Dreyfus (10) (1986) skill acquisition model, which details the progression from novice to expert, and on regulated healthcare scope-of-practice frameworks, such as the multi-professional structure of the NHS for advanced practice. The NHS framework develops clinicians' knowledge and skills for defined roles (11).

Dreyfus' stages map how expertise evolves, but do not specify permissions. Importantly, healthcare frameworks assign permissions but require professional registration, unlike sports sci-

ence approaches. This paper integrates the two models to align with the performance support department's decision paths.

		Scope of Practice →			
		Data & Monitoring	Interpretation & Insight	Intervention Design	Multidisciplinary Decision Making
Depth of Expertise ↓	Tier 1 Supervised (Early Career)	<b>Permitted (Supervised)</b> Data collection & cleaning Protocol Runs Produces Descriptive Reports	<b>Beyond Scope</b> May contribute to interpretation under direct supervision, but does not own recommendations	<b>Beyond Scope</b> Observes and assists in delivery, but does not directly design interventions	<b>Beyond Scope</b> Few decisions, if any, made in daily readiness, return-to-play, or team selection conversations.
	Tier 2 Competent Accredited (CASES, UKSCA)	<b>Permitted</b> Monitors own workflow Independent data checks & reporting	<b>Permitted</b> Interprets routine data Flags anomalies Translates findings into staff-facing reports.	<b>Permitted (with supervision)</b> Delivers interventions within agreed protocols. May not unilaterally override them.	<b>Beyond Scope</b> Contributes data and context to multidisciplinary team meetings; few, if any, decision rights
	Tier 3 Proficient 5 years + applied experience	<b>Permitted</b> Designs monitoring frameworks. Sets thresholds, creates reporting standards	<b>Permitted</b> Responsible for interpretation in novel or ambiguous cases; Defends reason and logic to coaching & medical staff when required.	<b>Permitted</b> Designs interventions from agreed performance principles. Holds discipline-specific decision rights.	<b>Permitted (with sign off)</b> Contributes to readiness, RTP, & load decisions. Documented agreement required with medical lead.
	Tier 4 Expert / Lead Strategy/Supervision	<b>Permitted</b> Sets departmental monitoring strategies. Accountable for data governance	<b>Permitted</b> The final data interpretation authority within discipline. Responsible for supervision and development of the Tier 1 and 2 staff.	<b>Permitted</b> Determines and designs interventions, performance department philosophy and the departmental standards.	<b>Permitted</b> Represents their discipline within the MDT decision making framework. Co-responsible for RTP decisions & loading provisions with the medical lead.

**Fig. 1.** A taxonomy of expertise in professional football support services. The vertical axis delineates the depth of practice across four tiers (Supervised, Competent, Proficient, Expert/Lead). The horizontal axis delineates the scope of decision-making across four domains (Data & Monitoring, Interpretation & Insight, Intervention Design, Multidisciplinary Decision Rights). Cells are coloured as Permitted (green), Permitted with Oversight or Sign-Off (blue), or Beyond Scope (grey).

### Discussion and Conclusion

The role of a Sport Scientist is often unclear and overlaps with other positions in professional football clubs. Depart-

ment leaders are responsible for managing performance teams in the absence of clear external standards. Accreditation can be obtained through CASES, but it is neither legally required nor frequently mentioned in job listings. Additionally, it does

not undergo the same rigorous scrutiny as HCPC physiotherapy registration (12), yet it still holds professional value by demonstrating that sport science practitioners possess the required scientific knowledge to work independently in their specific area of expertise (13). However, it is highly possible that a practitioner might hold accreditation but operate beyond their expertise, while another may excel without any formal accreditation.

A significant gap between the medical and performance fields remains informal. Decisions about when players return to play and their fitness levels often draw on both sports science and medical expertise. If not properly managed, this can lead to reliance on informal consensus and unclear role definitions during the critical process of restoring players to pre-injury performance (14,15). While this approach may work well when teams collaborate closely, it often falters during staffing changes, when clear distinctions are crucial. Stewart et al. (2) emphasise that recruitment, team training, and performance evaluations should consider multiple factors, including interpersonal skills and shared mental models. Thus, creating a robust accreditation system could formalise these criteria, clarify their scope, and incorporate regular audits to ensure ongoing effectiveness. As a result, the taxonomy presented here has three key benefits: it enables consistent role transferability among clubs, offers clear standards for career progression, and establishes a documented process for multidisciplinary decisions—thereby improving the current informal method.

A notable strength of this proposed taxonomic framework is that it facilitates the portability of practitioner roles, ensuring that a Tier 3 practitioner transitioning to a new club presents a clearly defined set of permitted tasks rather than merely a job title. The framework guarantees transparency in career advancement, enabling practitioners to refer to explicit criteria for progression from Tier 2 to Tier 3 and reducing reliance on informal feedback. Additionally, the framework delineates a precise, formal boundary with the medical profession. The multidisciplinary column requires a documented co-signature, superseding assumptions about team consensus and ensuring accountability for joint decisions. Without such enforcement, the taxonomy would remain more symbolic than practical.

External audits are advised, including reviews of decision logs and sampling of meeting records. These audits could lead to the revocation of accreditation if practitioners overstep their scope. This approach, based on clinical governance models (11), fills an important gap. League licensing provides a practical means to enforce standards, similar to the club licensing requirements for academies, medical, and safety standards used by the Premier League and EFL. Staffing at the first-team performance level should follow a comparable framework, with each discipline led by an accredited Tier 3 or 4 leader, and Tier 1 staff working under documented supervision. Personnel in Tier 2 and above should hold relevant certifications, such as CASES or UKSCA, and the proposed measures should influence how practitioners are recruited within professional football clubs.

Although concerns may be raised that increased regulation could limit internship opportunities for developing practitioners and graduates, the proposed taxonomy directly addresses this issue by explicitly designating Tier 1 for protected, supervised early-career practice. Another challenge identified is the difficulty of delineating the boundaries of medical practice, a task that remains complex and vital to the taxonomy. While not exhaustive, the requirement for a documented co-signature ensures greater consistency than relying on informal consensus.

## Key Points

- The taxonomic classification is conceptual and has not yet been empirically validated; the critical next step is to pilot its implementation within a club context.
- Tier definitions are aligned with UK accreditation standards; for international transfers, it is necessary to map them to the equivalent global bodies.
- The boundary between medical and performance domains is identified; however, it is not clearly defined for decision-making processes.
- The framework does not encompass data scientists and analysts whose responsibilities extend across support services and recruitment, where scope-related questions manifest in different forms.
- Recruitment: Clearly specify the required level and scope of practice in future job descriptions, rather than using hybrid titles that lack a clear definition. This can be achieved by ensuring that accreditation is classified as a Tier 2 or higher requirement.
- Practitioner Supervision: Document the supervision relationships among Tier 1 staff, identify the responsible Tier 3/4 lead, and specify which decisions require sign-off by a lead practitioner.
- Multidisciplinary Meetings: Require a documented agreement between the performance and medical leads for any decision falling within the Multidisciplinary Decision Rights column.
- Progression: Use the taxonomy as a distinct framework for tier progression, establishing well-defined criteria for moving from Tier 2 to Tier 3. Create opportunities and pathways that allow lower-tier practitioners to advance.
- League Licensing: Advocate for the adoption of staffing standards for performance services within the Premier League, EFL and WSL club licensing regulations, mandating an accredited Tier 3 or 4 lead in each support discipline to improve process and decision making across clubs.
- Accreditation: Update the process to incorporate assessments of applied competence and conduct scheduled audits of decision logs following the clinical governance model.

## Conflicts of interest

The author declares no conflicts of interest.

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