Beyond the Scoreboard: Redefining Performance Staff Assessment in Elite Sports Organizations

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Headline

In corporate high-performance settings, Key Performance Indicators (KPIs) play a pivotal role in assessing employee performance, offering several advantages to organizations. KPIs serve as metrics signifying a company's overall health and progress (Schein 2004, Pohl 2022). They promote transparency by measuring efficiency and output, providing insights into business success, whether at the company, departmental, or individual level. Well-defined KPIs set achievable goals, both for individuals and the organization as a whole, enabling performance evaluation to identify high-performers and areas requiring improvement. Additionally, KPIs allow leadership to adapt expectations based on trends, fostering motivation among employees through clear, attainable objectives. Importantly, employees' ability to meet their KPIs can impact bonuses and job security. Furthermore, transparent objectives drive alignment and integration across individuals, teams, and departments, facilitating efficient workflows and processes while propelling organizations toward critical outcomes and process goals. This integrated approach enhances communication and collaboration, ensuring that everyone works cohesively toward shared objectives and promoting overall organizational success.

In the realm of elite sports, particularly professional football (soccer), assessing staff performance is a complex task, quite distinct from the corporate landscape. Notably, KPIs are scarce in this arena, sparking a debate surrounding the root causes. On one side of the argument, the absence of KPIs may be attributed to a lack of clear objectives within and across disciplines, hindering the establishment of accountability throughout the entire process. Conversely, an alternative reason may be related to the fact that in professional sports, especially team sports, setting up KPIs presents a distinctive challenge due to the intricate nature of the game. Quantifying the impact of support staff on team victories and individual player well-being proves exceedingly challenging due to the multitude of genetic and physiological factors at play. In this context, a recent study explored the correlation between the level of advancement in sports science practices within clubs, as measured by Performance Science Index scores (Buchheit 2022), and the overall performance of clubs, represented by Elo ranking. Surprisingly, the research revealed that advanced sports science and medical practices did not necessarily correlate with on-field performance. This finding suggests that what occurs behind the scenes can sometimes be dissociated from the outcomes observed on the pitch.

Consequently, support staff often find themselves solely evaluated based on team outcomes, even when a team performs well despite potential coaching deficiencies. This focus on outcomes rather than underlying processes blurs the definition of performance for support staff. Assessing practitioners across various disciplines proves inconsistent, as evaluations often do not consider their domain-specific interventions and their resulting effects. Consequently, practitioners' advancement or departure from the sports industry tends to hinge more on their interpersonal skills and their capacity to navigate the environment rather than their technical proficiency. This challenge extends to evaluating the quality and significance of work at both departmental and individual levels. Additionally, it raises questions about how to approach the interdependent aspects of performance support teams' work, where some KPIs and objectives may be co-owned, shared, or entail dependence between interacting elements.

Complicating matters further is the tendency to conflate KPIs for sports like objectives for players to achieve specific fitness levels or in-game KPIs (Cardinale 2022) with the current project KPIs used for staff evaluation. When it comes to athlete KPIs, the complexity deepens, as physically-derived KPIs or benchmarks often show poor correlations with success in team sports (Clubb 2023). This discrepancy arises from the fact that success in team sports, particularly soccer, goes beyond physical performance and involves scoring goals and overall game strategy. The inability to define KPIs for the sport and the confusion surrounding the types of KPIs needed further compound the complexities faced in this unique context.

Aim

We surveyed 51 practitioners in elite sports organizations to better understand the current practices regarding staff evaluation, and provide guidance for practitioners seeking objectivity in a field often driven by empiricism, instinct, and ego (Buchheit & Perry 2021). The framework offered in this manuscript is designed to be applicable to practitioners within multidisciplinary teams, without delving into discipline-specific KPIs.

Methods

The survey was collaboratively developed by the three authors in conjunction with a panel of seasoned experts who possess extensive experience in overseeing teams of practitioners. This collective effort aimed to establish a comprehensive list of KPI suggestions, which were subsequently assessed for their relevance by the practitioners. The survey was then made available on a Google form in English and advertised on social media in May 2023. The survey was then closed on 31st Sep

2023. Following the few demographic questions, the survey was made of the following 3 sections (with each containing about 5-10 short questions)

1. Methods of staff and department evaluation and use of KPIs (mix of open and closed questions, where practitioners were asked to rate the relevance of several suggested items; 0 = No relevance at all, 1 = Of little relevance, 2 = Moderate relevance, 3 = High relevance, 4 = Very high relevance).
2. Relevance of KPIs to evaluate a department's performance (same relevance scale as above).
3. Relevance of KPIs to evaluate individual staff performance (same relevance scale as above).

Data analysis
Descriptive data are presented as percentages of the total number of responders - When multiple responses were allowed for a given question, the percentages can sum up to more than 100%. For KPIs relevance analysis, only the "very high relevance" scores are reported as a way to narrow down our focus on the most important aspects of staff/department evaluation.

Results

Demographics
Here's the proportion of sports they work in, the performance level of their organizations, and their job titles, ranked from the greatest proportion to the lowest:

1. Sport:
   - Soccer: 69%
   - Rugby: 10%
   - Basketball: 6%
   - Individual sport: 2%
   - Australian Rule Football: 2%
   - Handball: 2%
   - Ice-Hockey: 2%
   - Netball: 2%
   - Surfing and Breaking: 2%
   - Baseball: 2%
   - Multisport: 2%
2. Performance Level:
   - Professional: 94%
   - Semi-professional: 2%
   - Middle School: 2%
   - Youth: 2%
3. Job Titles:
   - Head/Director of Performance: 60%
   - Lead Strength and Conditioning Coach: 14%
   - Head of Medical: 14%
   - 1st Team Physiotherapist: 8%
   - Rehab Coach: 2%
   - 1st Team Sports Scientist: 2%

The number of staff managed within the departments of the practitioners:
1. Small Teams:
   - 1-3 staff: 10% of respondents
   - 3-5 staff: 10% of respondents
2. Medium Teams:
   - 5-7 staff: 12% of respondents
   - 7-10 staff: 27% of respondents
3. Large Teams:
   - 10-15 staff: 26% of respondents
   - >15 staff: 15% of respondents

Evaluation methods for staff and departments
Most sports organizations conduct regular reviews, including quarterly, tri-annual, and annual reviews, where staff present their aims, goals, and achievements. These reviews may involve discussions and meetings to assess coaching delivery, staff performance, and the fulfillment of objectives. Technology and data-driven tools may also be integrated into these reviews to support the assessment process. The methods used for staff evaluation can be summarized into the following two main approaches:

- *Objective Performance Metrics and KPIs*: Many respondents mentioned the use of specific KPIs or performance metrics to assess staff effectiveness. These KPIs are often related to achieving set objectives, such as player availability or communication between staff, and are often organized following a specific process-oriented SMART approach:
  - Specific: Your KPIs should be clearly and precisely documented, describing what needs to be accomplished.
  - Measurable: KPIs must be measurable, enabling you to determine when the objective was achieved.
  - Attainable: KPIs should challenge staff but remain within reach, not unattainable.
  - Relevant: KPIs must correlate with specific and applicable objectives.
  - Time-bound: KPIs should include a deadline and timeframe for completion.
- *Subjective Assessment and Feedback*: Subjective assessment methods, such as athlete and coach feedback, surveys, and qualitative analysis, are frequently employed. These assessments may involve direct conversations, Google forms, or performance reviews. The focus here is on gathering opinions and feedback from relevant stakeholders.

Use of clearly-defined KPIs in elite sports organizations
Among the 51 practitioners interviewed, 87% reported setting objectives for Practitioners/Departments. The large majority of their KPIs are reported to be both department and staff-specific (Table 1). The main reason that motivates the use of KPIs is no surprise to measure the impact of practitioners and departments (i.e., the MDT) (Table 2). Practitioners also indicated that KPIs are generally (69%) defined through the system and shared collectively when they set objectives for practitioners or departments and agree on KPIs for departments or the MDT. The main barriers to KPIs implementation KPIs are not easy to define (60%) and the lack of support from superiors and key stakeholders (26%) (Table 3).

Table 1. The structure of KPIs for both departments and individual staff, along with the proportion of each response based on survey data.

KPI Structure	Proportion (%)
Department- and Staff-specific	49
Department-specific only	29
Staff-specific only	18
Same for all staff	4
Same for all departments	0

Table 2. Different reasons for using KPIs based on survey responses, providing insights into the diverse motivations behind KPI implementation in elite sports organizations.

Reasons for Using KPIs	Proportion (%)
Measure the impact of practitioners	68
Measure the impact of MDT	65
Orientate staff CDP (Continuous Development and Progress)	50
Change/adapt job descriptions from one season to the next	47
Pay rise	27
Sack people	14

Table 3. Challenges and barriers in implementing KPIs and the proportion of each response.

Challenges and Barriers to Implementing KPIs	Proportion (%)
KPIs are not easy to define	60
No support from superiors and key stakeholders	26
Staff reluctant to have KPIs	19
Others	5

Table 4. Practitioners' preferences for the ideal composition of KPIs when evaluating a department's performance. The percentages reflect the balance between process-driven and outcomes-driven KPIs, providing insights into practitioners' perspectives on the evaluation criteria.

Ideal KPI Composition	Proportion (%)
0% Process / 100% Outcome	2
10% Process / 90% Outcome	2
20% Process / 80% Outcome	2
30% Process / 70% Outcome	4
40% Process / 60% Outcome	4
50% Process / 50% Outcome	22
60% Process / 40% Outcome	18
70% Process / 30% Outcome	24
80% Process / 20% Outcome	18
90% Process / 10% Outcome	2
100% Process / 0% Outcome	4

Table 5. Practitioners' ideal percentages for balancing process- and outcomes-driven KPIs when evaluating individual staff performance.

% Ideal Balance	Proportion (%)
20% Process / 80% Outcome	4
30% Process / 70% Outcome	6
40% Process / 60% Outcome	6
50% Process / 50% Outcome	14
60% Process / 40% Outcome	14
70% Process / 30% Outcome	29
80% Process / 20% Outcome	22
90% Process / 10% Outcome	2
100% Process / 0% Outcome	4

Table 6. Practitioners' ratings for the suggested MDT overall KPIs, ranked based on the percentage of "Very High Relevance" responses, with the highest relevance at the top.

Suggestions of MDT Overall KPIs	Very High Relevance (%)
Overall player availability	66
Quality of communication with technical staff about players' health and performance	60
Following established and evidence-informed protocols (e.g., RTP, prevention, recovery)	54
Developing forward-thinking practitioners	52
Allowing players to compete every 3 days (recovery and treatment)	44
Quality and relevance of the information provided to the coaching staff	42
Monitoring player's health and fitness	42
Being on the top of best practices	42
Keeping players fit irrespective of their playing minutes	40
Players's education (nutrition, sleep, hygiène)	38
Screening players	35
Player (physical) performance (generic)	35
Returning quickly following an injury	30
Being at the top of the literature	13

Suggestions of MDT overall KPIs

Tables 6 to 14 show practitioners' perception of the relevance of several suggested KPIs to be used when evaluating the performance of a department (e.g., Strength & conditioning, Performance, medical, or the overall multidisciplinary team, MDT).

Practitioners provided additional valuable suggestions for KPIs for the multidisciplinary team (MDT). These include assessing the quality of communication within the MDT and inter-departments, emphasizing the capacity to influence staff behaviors and enhance their processes, and promoting self-reflection, adaptability, and continuous improvement. Moreover, they stressed the importance of effective planning, considering athletes' perceptions, and fostering collaboration, kindness, honesty, and psychological safety within the team.

Elite practitioners have put forth insightful suggestions to enhance communication and strategy-focused KPIs. They underscore the importance of improving communication during the Return to Play (RTP) transition, especially between medical and Strength and Conditioning (S&C) teams, ensuring clarity in roles and responsibilities. Additionally, practitioners recognize the challenge of meeting fatigue and advocate for effective communication during regular staff meetings to address this issue. They propose 12-week review meetings that involve various stakeholders as platforms for open communication and strategic discussions. Leveraging WhatsApp chat groups can enable efficient communication among the MDT and other practitioner groups. These recommendations collec-tively aim to enhance the MDT's communication and strategy for optimal performance.

The additional suggestions for players' health and fitness KPIs underscore a holistic approach to player well-being and performance. They recommend incorporating performance psychology education, comprehensive return-to-play plans with MDT support, personalized supplementation regimes, mental health monitoring, and a range of educational sessions and consultations covering nutrition, physical health, lifestyle, and mental well-being. The suggestions also emphasize respecting players' autonomy and privacy, allowing them to choose what they share, such as sleep and sleep hygiene, in alignment with a player-centric model. These recommendations highlight the significance of addressing psychological, nutritional, and mental health aspects in addition to physical fitness for optimal player health and performance.

Further suggestions for injuries and rehabilitation KPIs highlight several critical aspects. First, permanent communication among medical and athletic trainer staff is considered non-negotiable, particularly in the context of diagnosis and effective communication throughout the MDT and with players and coaching staff. Emphasizing the individuality of the rehabilitation process, where injury classification is not absolute and tissue remodeling varies between athletes, is paramount. Measuring progress relative to athletes' unique benchmarks is also believed to be relevant.

Additional suggestions for planning and periodization KPIs include the prioritization of training phases, and differentiating between development and maintenance requirements.

Flexibility and adaptability in yearly training plans are emphasized to navigate the dynamic nature of professional sports.

Additional KPIs suggestions for building a sustainable and evolving long-term club methodology and approach include maintaining permanent staff education, ensuring integration with upper management, emphasizing continuity of leadership, fostering regular interaction with top executives, implementing a staff care strategy, and establishing a strong team culture, an integrated performance model, and athlete-centric staffing.

Table 7. Practitioners' ratings for the suggested communication and strategy KPIs, ranked based on the percentage of "Very High Relevance" responses, with the highest relevance at the top.

Suggestions of MDT communication strategies KPIs	Very High Relevance (%)
Clearly established communication lines and responsibilities between all the staff	71
Clearly formulated ways of communication and decision-making/Responsibility	63
Long-term plans for the MDT (e.g, protocols development, integration of new technology)	46
Establish a weekly and monthly reporting summary for key stakeholders that highlights valuable information from the current training and games program, injury updates, etc.	42
Daily meetings AM and PM within the MDT and with key stakeholders (MDT + Staff) regarding the training process	27

Table 8. Practitioners' ratings for the suggested player testing, monitoring, and benchmarking KPIs based on their "Very High Relevance" scores. Higher percentages indicate higher relevance according to the respondents.

Player testing, monitoring, and benchmarking KPIs	Very High Relevance (%)
Create individual player profiles with practical info	60
Performance analysis (e.g., tracking match data)	52
Create a live club-wide testing database and reporting system	48
Implementation of a monitoring system to assess player readiness	38

Table 9. Practitioners' ratings for the suggested player health and fitness monitoring KPIs based on their "Very High Relevance" scores. Higher percentages indicate higher relevance according to the respondents.

Player health and fitness monitoring KPIs	Very High Relevance (%)
Individual development plan for players regarding endurance/ strength/ speed/ movement	58
Individual injury prevention routines are offered to players at the back of the screening	58
Post-match recovery routines	46
Education about hygiene/prevention and providing documentation throughout the season	35

Table 10. Practitioners' ratings for the suggested Planning and Periodisation KPIs based on their "Very High Relevance" scores. Higher percentages indicate higher relevance according to the respondents.

Planning and Periodisation KPIs	Very High Relevance (%)
2-6 weeks team periodization plan for team training	48
Mid-season to Season's individual goals	38
Predictive locomotor load calculator based on historical GPS training data and review process	35
Automated process team training planning (e.g., set training phases, typical micro-cycles)	33

Table 11. Practitioners' ratings for the suggested injuries and rehabilitation KPIs, based on their "Very High Relevance" scores. Higher percentages indicate higher relevance according to the respondents.

Injuries and rehabilitation KPIs	Very High Relevance (%)
The collaboration process with the coaching staff for player reintegration (last RTP phase)	75
Quality of diagnostics	67
Ability to share information about the injury and the RTP process with (external-to-the-club) peers to guarantee the best outcome possible	54
Creating injury-specific algorithms for the RTP process based on scientific literature and personal experience aiming for the quickest but safe RTP process without re-injuries	29

Table 12. Practitioners' opinions regarding the accountability of the MDT for RTP duration, with percentages indicating the proportion of each response.

Accountability of the MDT for RTP Duration	Proportion (%)
It is the nature of the injury human physiology and the context	55
70% MDT	16
50% MDT	14
>70% MDT	8
It is all on the MDT	6
<30% MDT	2

Table 13. Practitioners' opinions regarding the accountability of the MDT for squad and player availability, with percentages indicating the proportion of each response.

Accountability of the MDT for Squad and Player Availability	Proportion (%)
50% MDT	43
30% MDT	16
It is all on the coaching staff	14
It is all on the MDT	12
70% MDT	10
>70% MDT	6

Table 14. Relevance of various KPI suggestions for building a sustainable and evolving long-term club methodology and approach, with items ranked based on the percentage of very high relevance responses.

KPI Suggestions for building a sustainable and evolving long-term club methodology and approach	% Very High Relevance
Sustainability of practices over time (willingness at the club to build things in the long term, irrespective of coaches changes)	65
Complete and detailed documentation available of screening/testing/team training/locomotor (GPS) load/individual strength training throughout the season	60
Repeatable/embedded procedures for all practices known by all staff	60
Injury epidemiology monitoring (from injury type to severity, etc.)	56
Have a mission, vision and values statement for the club/organization	54
Sustainability of the approach and KPIs (structures within the club to allow for a process-oriented approach)	48
Processes to improve knowledge acquisition (e.g., R& D)	42

Suggestions of individual KPIs

Tables 15 to 18 show practitioners' perception of the relevance of several suggested KPIs to be used at the individual level. Further suggestions for job delivery KPIs focus on the use of a specific checklist for delivery, emphasizing the importance of session outcomes being clearly explained and linked to the broader playing philosophy. Recommendations for staff KPIs include utilizing demos and cues effectively, aligned feedback relevant to the aims and principles outlined at the outset. Tracking technical or tactical proficiency over time and maintaining between-session interactions with players is also highlighted, emphasizing the relentless pursuit of development. Additionally, the significance of building human connection and trust with athletes is underlined as a critical factor in job delivery.

Table 15. Practitioners' rating for Job delivery KPIs.

Job Delivery KPIs	Very High Relevance (%)
Deliver best-practices sessions/pieces of advice/treatment	56
Work timely in relation to team practice and at the sport pace	54
Deliver evidence-informed sessions/pieces of advice/treatment	44
Players & athletes could attest that the practices/pieces of advice/treatment offered are top-class	42

Table 16. Relevance of various individual KPI suggestions in terms of communication and soft skills, with items ranked based on the percentage of very high relevance responses.

Communication and soft skills KPIs	Very High Relevance (%)
Ability to provide and receive critical and productive feedback to/from co-workers in the department	73
Quality of global communication with colleagues in the same discipline	69
Ability to provide and receive critical and productive feedback to/from colleagues on the multidisciplinary team	69
Quality of global communication with colleagues of the multidisciplinary team	67
Quality of global communication with players	65
Ability to provide and receive critical and productive feedback when in disagreement with colleagues	62
Ability to use the communication tools provided by the club	54

Table 17. Relevance of various individual KPI suggestions in terms of personal traits, with items ranked based on the percentage of very high relevance responses.

Personal traits KPIs	Very High Relevance (%)
Willingness to progress and grow personally	75
Strong interpersonal skills - build and maintain relationships	71
Ability to be solution-focused and not create problems	63
Adaptation to change	63
Effective management of one's time	54
Willingness to innovate in his/her daily practice	46
Productive use of downtime (travel, etc)	33
Staying in your role	29

Table 18. Relevance of various individual KPI suggestions in terms of organizational traits, with items ranked based on the percentage of very high relevance responses.

Organizational traits KPIs	Very High Relevance (%)
Dynamics of rest/leave days (happy to back up a colleague on a rest day when needed but have the ability to rest and recover as well)	48
Global investment	31
Integration into the life of the group ("likeability" in the broad sense) with staff	27
Integration into the life of the group ("likeability" in the broad sense) with players	25
Establishment (autonomous) of a personal project in the medium/long term	23

Discussion

Our study provides valuable insights into the use and structuring of KPIs in elite sports organizations. The findings reveal a nuanced landscape of KPI usage, emphasizing their pivotal role in enhancing performance evaluation processes. Among the main methods employed for staff performance assessment, practitioners rely on a combination of Objective Performance Metrics and KPIs and Subjective Assessment and Feedback. Regular reviews and meetings are integral to these evaluations, often incorporating technology and data-driven tools to support the assessment process. Notably, 87% of the surveyed practitioners set objectives for Practitioners/Departments, primarily driven by the need to measure the impact of practitioners and departments, with a significant emphasis on department and staff-specific KPIs. While KPIs offer substantial benefits, the barriers to their imple-

mentation are attributed to challenges in defining them and a lack of support from superiors and key stakeholders. Furthermore, practitioners advocate for a more process-driven approach, emphasizing the importance of assessing the quality and relevance of work at both department and individual levels.

Without delving into all the intricacies of all the present results within this section, the primary takeaway is that KPIs rated as very relevant by 2/3 of the practitioners consistently revolve around communication, collaboration, self-reflection, and personal growth. For instance, in the category of department communication KPIs, the top choice was "Clearly established communication lines and responsibilities between all the staff," with a very high relevance rating from 71% of respondents. When it comes to rehabilitation specifically for example, the most highly regarded KPIs were those related to collaboration with the coaching staff (75%), ranking just slightly above the quality of diagnostics (67%). This observation aligns closely with the findings from another recent survey conducted by Buchheit et al. in 2023. In their study, which included the input of 85 elite practitioners engaged in the RTP process, a "cooperative and sequential approach" was consistently recognized as pivotal. This underscores the significance of effective and transparent communication among diverse staff members for achieving a successful RTP.

Consistent emphasis has been placed on the significance of effective communication within performance roles in elite sports organizations (Buchheit & Carolan 2019). As the number of "performance staff" has substantially grown over the years, there is an increasing demand for defining their roles and responsibilities more clearly. Recent survey data from 218 performance practitioners shed light on the daily challenges they used to encounter and delved into the influence of these roles on long-term club processes, staff communication, and the overall performance of the team (Buchheit & Carolan 2019). More precisely, in this latter study, responders highlighted the importance of emphasizing the process of defining and aligning intentions within a sports organization's staff structure. In the realm of elite sports organizations, creating a leadership-led structured hierarchy for defining and aligning intentions within the staff structure is essential. This hierarchy not only fosters clear intentions and accountability from top to bottom but also facilitates effective communication across

the organization. By assuming a leadership role with strategic decision-making authority, this approach minimizes power gradients, mitigates micro-politics, eliminates silos, and reduces individual and departmental competition, ultimately promoting effective communication, alignment, and clarity within the organization (Buchheit & Carolan, 2019).

It's important to emphasize that departmental KPIs should always be assessed based on their potential contribution to the overall success of the organization (Pohl 2022). For instance, "player availability" serves as a prime example of a robust MDT KPI, with 66% indicating very high relevance (Table 6). This KPI directly influences team performance (Eliakim 2020, Hägglund 2013). However, it's crucial to recognize that player availability isn't exclusively an MDT KPI; it's also considered a shared KPI among the MDT, coaching staff, and the players themselves (Tables 12 and 13). Practitioners tend to favor a collective responsibility approach, with the preferred option being a "50% MDT/50% coaching staff" split (43%). This underscores the importance of jointly validating the significance and hierarchy of each departmental KPI and sharing the relative responsibility and accountability when utilizing these KPIs for decision-making purposes.

At the individual level, KPIs related to communication and soft skills, focusing on the ability to provide and receive valuable feedback, received very high relevance ratings from 73% of the practitioners, while the quality of global communication with colleagues in the same discipline was at 69%. Personal traits KPIs, like the willingness to grow personally (75%) and possessing strong interpersonal skills for nurturing relationships (71%), also received exceptionally positive assessments from the practitioners.

These findings collectively demonstrate the multifaceted nature of performance evaluation in elite sports, highlighting the significance of tailored KPIs in various domains. Our study underscores the need for a balanced approach, incorporating both objective and subjective assessments, technology-driven tools, and a clear definition of KPIs to enhance the evaluation of practitioners and departments, ultimately contributing to improved sports performance.

As a way to end with a practical demonstration of the process, Table 19 shows an example of a SMART process related to the KPI around the quality of communication between the MDT and coaches:

Table 19. Example of a SMART process implemented for the KPI "Quality of communication between the MDT and coaches".

SMART steps	Actions
Specific	Improve communication between the MDT and coaches when a player returns to training with the group (partial and full sessions)
Measurable	There is a clear progression in locomotor load (i.e., GPS metrics) when the players get back to training with the group, with the players performing substantially less load than the rest of the group during the first couple of sessions (with the duration of this load management period being inversely related to the duration of the lay-off, Buchheit 2023).
Attainable	Implement specific meetings involving at least the doctor, the lead physio, the lead conditioning coach, and a coach assistant. Develop tools to streamline internal communication processes (player-specific calendar and reports).
Relevant	Enhanced communication will lead to fewer misunderstandings, better player load management, reduced (re)injuries, and improved overall payer availability - which should, ultimately improve team performance.
Time-bound	Achieve zero loading mistakes within three months, with progress assessed each time there is a new player returning to train.

Conclusion

The present results showcase a nuanced KPI landscape, underscoring their vital role in improving performance evaluations. Notably, 87% of respondents set objectives for Practitioners/Departments, mainly to gauge the influence of these entities, with a strong focus on department and staff-specific KPIs. Although KPIs offer significant advantages, obstacles to their implementation arise. Defining or identifying KPIs and Objectives for a practitioner or MDT (as already stated) can be somewhat challenging due to the interrelated and interactive nature of performance support teams. First, getting clarity of 'what' and 'why' certain objectives are important should be derived through the sport or team performance model. Second, aligning objectives and KPIs where the organizational structure is organized into disciplines i.e. (performance, medical, or coaching) creates challenges because it demands the effective alignment of superiors and key stakeholders. In the realm of elite sports organizations, creating a leadership-led structured hierarchy for defining and aligning intentions within the staff structure is essential. It ensures clear intentions and accountability from top to bottom, eliminating silos and promoting effective communication.

The main conclusion from the survey is that KPIs rated as very highly relevant by over 66% of practitioners consistently emphasize communication, collaboration, self-reflection, and personal growth, with specific examples including "Clearly established communication lines and responsibilities between all the staff" (71%) in department communication KPIs and strong preferences for "collaboration in injuries and rehabilitation" KPIs (75%), as well as strong ratings for communication and soft skills KPIs (73% for feedback and 69% for global communication) and personal traits KPIs (75% for personal growth and 71% for interpersonal skills) at the individual level. The present results offer valuable guidance for the design and application of department and staff-specific evaluation KPIs within the unique context of each sports organization.

The final and crucial step in implementing this enhanced department and staff evaluation strategy is to establish practical guidelines for addressing the KPIs in practice. This includes determining the measurement units for each KPIs (e.g., binary -yes or no-, Likert scale ratings, number of specific actions performed, or days lost because of injuries). Additionally, it involves defining the procedures for routine implementation, specifying when and how these KPIs should be consistently monitored over time, and ultimately ensuring that they are effectively utilized to inform decision-making processes. This approach could lead to a more comprehensive and balanced evaluation system that addresses both technical and non-technical aspects of performance, depending on the specific goals and needs of the sports organization. It's worth considering further reflections about where potential deficits lie and identifying the support that the MDT and practitioners require to enhance their effectiveness.

Key Findings

Evaluation methods and KPIs use among practitioners

- The survey conducted among elite sports practitioners revealed essential insights into the use and structuring of KPIs in sports organizations, and offered valuable guidance for the design of department and staff-specific evaluation KPIs.
- Present findings collectively reflect the nuanced landscape of KPI usage and the critical role they play in enhancing sports organizations' performance evaluation processes.
- The two main methods used to assess staff performance include:
  - ○ Objective Performance Metrics and KPIs
  - ○ Subjective Assessment and Feedback
- These evaluations happen via regular reviews and meetings; technology and data-driven tools are often integrated into these methods to support the assessment process.
- Among the 51 practitioners interviewed, 87% reported setting objectives for Practitioners/Departments.
- The main reason that motivates the use of KPIs is with no surprise to measure the impact of practitioners and departments (i.e., the MDT).
- The large majority of reported KPIs were both department and staff-specific.
- The main barriers to KPIs implementation are that they are not easy to define (60%) and the lack of support from superiors and key stakeholders (26%).
- When evaluating staff performance, 85% of the practitioners believe that the evaluation should be more process- than outcome-driven (i.e., 70-80% for process-driven being the preferred rating).

Department (MDT) KPIs

- Practitioners held the highest preference for MDT overall KPIs related to "Overall player availability" with 66% very high relevance, followed by "Quality of communication with technical staff about players' health and performance" at 60%.
- Injuries and rehabilitation KPIs were highly valued by practitioners, with the two most preferred KPIs being "The overall collaboration process with the coaching staff for player reintegration" (75%) and "The quality of diagnostics" (67%).
- The KPI with the highest preference among practitioners in relation to communication was "Clearly established communication lines and responsibilities between all the staff," with 71% indicating very high relevance.
- The most preferred player testing, monitoring, and benchmarking KPIs among practitioners were "Creating individual player profiles with practical information" (60%), followed by "Performance analysis using match data" (52%).
- Practitioners indicated that the most highly preferred player health and fitness monitoring KPIs, were "Offering individual development plans for players regarding endurance, strength, speed, and movement", as well as "Offering individual injury prevention routines following screenings", both receiving 58% relevance.
- Among the Planning and Periodisation KPIs, the highest preference was for the "2-6 weeks team periodization plan for team training" (48%).
- Practitioners express polarized opinions in terms of responsibility regarding RTP duration; 55% think that "It is the nature of the injury, human physiology, and the context" (55%) while 30% believe that it's "≥70% MDT" responsibility.
- For squad and player availability, practitioners leaned towards collective responsibility, with the most preferred option being "50% MDT/50% coaching staff" (43%).
- The KPI suggestions with the highest preference among practitioners for building a sustainable and evolving long-term club methodology and approach were "Sustainability of practices over time" with 65% very high relevance, and "Complete and detailed documentation available of screening/testing/team training/locomotor (GPS) load/individual strength training throughout the season" with 60% very high relevance.

Individual KPIs

- The personal traits KPIs with the two highest preferences were "Willingness to progress and grow personally" at 75% and "Strong inter-personal skills - build and maintain relationships" at 71% in terms of very high relevance.
- When assessing individual communication and soft skills KPIs, the two highest-preference indicators among practitioners were the "Ability to provide and receive critical and productive feedback to/from co-workers in the department" at 73% and "Quality of global communication with colleagues in the same discipline" at 69%.
- Among the Job Delivery KPIs, the two with the highest preference among practitioners were "Deliver best-practices sessions/pieces of advice/treatment" with 56% very high relevance and "Job always done timely in relation to team practice at the sport pace" with 54% very high relevance.
- Organizational traits KPIs received mixed consensus and relatively lower ratings in the "very high relevance" category, with "Dynamics of rest/leave day" being rated as highly relevant by 48% of the practitioners, and "Global investment" receiving a very high relevance rating from 31% of respondents.

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