

# THE GAELIC GAMES PLAYER PATHWAY & SPORTS SCIENCE 2030 VISION









#### INTRODUCTION

Healthy and holistic player development is led by coaches, teachers, parents and guardians, and can be supported by evidence-based education and qualified practitioners from various disciplines of sports science. This sports science knowledge and experience is most beneficial to coaches and players when consistently and appropriately applied and delivered in practice within the values of Gaelic Games.

The purpose of this guide is to provide a framework for the application of sports science across Gaelic Games that is aligned to the Gaelic Games Player Pathway (Figure 1). It is important that the Gaelic Games workforce, clubs, counties, administrators, coaches, players and practitioners consider what is presented as recommendations for best practice. It is envisioned that the full delivery of this programme can be achieved by 2030 with capacity for adaptation and responsiveness to an ever evolving and expanding evidence base for sports science, particularly in the context of Gaelic Games.



Figure 1: Gaelic Games Player Pathway

#### 1. GAELIC GAMES PLAYER PATHWAY

The new Gaelic Games Player Pathway¹ provides a structure for participation, development and performance to ensure positive experiences, fun, enjoyment and variety for all players through their clubs, schools, colleges and counties. The motivation for a fresh model was based on an identified need to prioritise and support the development of players and coaches in Gaelic Games (Dempsey *et al.*, 2019). This new Gaelic Games Player Pathway has been developed based on the FTEM framework developed by the Australian Institute of Sport, which is used by other international sports bodies (Gulbin *et al.*, 2013; Bergeron *et al.*, 2015; Weissensteiner, 2017) and, in this instance, is adapted to the specific needs and context of Gaelic Games.

Gaelic Games' unique culture plays a central role in the organisation of games and development of both players and coaches. The Gaelic Games Player Pathway places the player at the centre of their own development, which is particularly relevant in the context of this guide; players must be positioned at the centre of all sports science activity. Player development is facilitated by and firmly rooted within our clubs and our communities and is underpinned by six guiding principles (Dempsey et al., 2020):

#### 1. Club is Core

Clubs are resourceful, positive environments where players feel valued and supported. As a central tenet in the player development process and through the proper implementation of pathway principles, clubs bring communities together and over time develop players' sense of belonging to where they are from, and a connection with and love of place.

#### 2. Player Centred

The Pathway is about empowering and connecting with players ensuring they feel listened to and in control of their own destiny within our games. It supports a vision that has long term goals and outcomes that equip players to reach their potential and become the best versions of themselves, both on and off the field. Engaging people with our games from a young age, encountering many positive experiences and transitioning through the various phases to ultimately enjoy a sustained involvement over a lifetime.

#### 3. Quality Coaching Experiences

The players learning environment, facilitated by a qualified coach, should be motivating, attuned to the needs of the individual player, and should provide appropriate levels of choice and player ownership. This should support a player's sense of 'I am making progress' and ensure their participation in Gaelic Game is a positive learning experience through high quality coaching experiences.

A key part of every coach's role is to create a co-ordinated and supportive environment that will facilitate learning and player development. The Pathway promotes shared responsibility for player development within a club or between club, school and development squad coaches. It requires a *synergy* among all stakeholders to display a real interest in how they relate to individual players and how coaches relate to each other. These relationships form the bedrock on which the success of the Pathway may be determined.

#### 4. Connection

The Pathway promotes a vision where players reside at the centre of the development process and within an environment that is *synergised*, *co-ordinated* and *supportive* of their particular needs. These environments stimulate connection whereby stakeholders utilise opportunities for communication, relationship-building and teamwork that focuses on supporting individual players and hence provide a sense of self-fulfilment, belonging and identity for all volunteers.

#### 5. Inclusive

Regardless of age, gender, race, ethnicity, sexuality, beliefs or socio-economic status, the Pathway is very clear in relation to supporting player development at all levels, *sustaining player involvement* and *retaining players* within the association. To achieve this, all players must feel valued, and a true sense of belonging.

#### 6. As Many as Possible for as Long as Possible

Early engagement in Gaelic sports for children is a key principle of the Pathway and will help to ensure *physical literacy* is prioritised as the foundations for physical activity throughout their lifetime. Prolonging this initial involvement with the objective of retaining as many people as possible within Gaelic Games is very important.

"Physical literacy is the motivation, confidence, physical competence, knowledge and understanding that enables a person to value and participate in physical activity throughout life."

(McKeown and May, 2022 p1.)

In order to cater for diversity in the nature and location of participation across the Pathway and to simplify the complex, non-linear process of player development, the interaction of three different strands at each pathway stage is considered - namely the Player, their Environment and the Game.

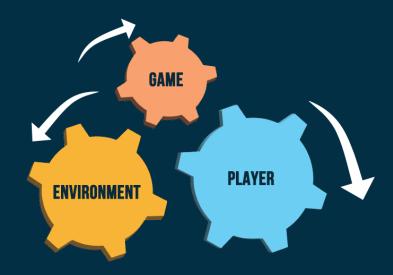


Figure 2: The Player, the Environment and the Game

The proposed Framework for Sports Science and various related outputs will align with the six guiding principles, three different strands and player attributes presented in the Gaelic Games Player Pathway<sup>1</sup> (Dempsey et al., 2020).

#### WHAT ARE THE SPORTS SCIENCES?

## "Sports science is the use of science to optimise participation, performance, and wellbeing in Gaelic Games"

The three main branches of sport science are physiology, biomechanics and psychology.

Biomechanics: Understanding how players move and how they could move better in a manner

that maximises their performance, whilst also minimising the risk of injury.

**Physiology:** Understanding how players respond to training and how to maximise physical

performance.

Psychology: Understanding how individual behaviours and sport systems can optimise

participation, performance and wellbeing.

In applied Gaelic Games contexts, these disciplines are commonly recognised as athletic development, nutrition, performance analysis, skill acquisition, physiotherapy and rehabilitation, and sport psychology.

ATHLETIC DEVELOPMENT	The holistic development of athleticism over time to optimise physical fitness.
NUTRITION	What, when and how you eat and drink to support health, participation, and
	performance.
PHYSIOTHERAPY & REHABILITATION	Prevention and treatment of injuries to maximise player availability.
SPORT PSYCHOLOGY	Applying principles of psychology to maximise enjoyment, optimise
	performance, and facilitate care around mental ill health.
PERFORMANCE ANALYSIS	The provision of timely insights to aid reflection and decision making for
	participation and performance.
SKILL ACQUISITION	Applying scientific principles to accelerate skill development, so as to
	maximise player progression and retention.

The principles and practices of sports science are relevant to the club-based elements (F1 – F3 stages) of Gaelic Games. At these stages, they are primarily delivered with and through the Gaelic Games workforce, coaches, parents, guardians and teachers, supported by sports science practitioners, if and when appropriate. The priority at this stage of the pathway is to optimise participation and wellbeing and to provide clubs with the education, confidence and specialist support where appropriate, to become self-sustainable and self-sufficient in the context of sport science. Sports science activity is also well recognised and embedded at the talent (T1-T4) and elite (E) stages of the Player Pathway where it is primarily delivered with coaches through practitioners to both develop and optimise player, and team, performance and wellbeing.

#### 2. THE ROLE OF THE COACH

It has been consistently acknowledged that coaches can play an integral role in player development as they have regular direct involvement with them (Fraser-Thomas and Côté, 2009). Players also carry considerable influence and control over the sport environment and are thus key drivers of participation, performance, and wellbeing (Cushion et al. 2012; Webster et al. 2017; Howie et al. 2020). Furthermore, there is evidence that players who experience good coaching, in a positive motivational climate where fun, enjoyment and variety prevail, are more likely to continue sport throughout their lifespan and develop sport-specific and psycho-social competencies (Back et al., 2022). Coaches can act as key role models and behaviour champions, having a significant impact on the wellbeing of their players and their lifetime participation in sport. In the Gaelic Games Coach Survey, 74% of coaches felt that promoting sport as part of a healthy lifestyle was the most significant opportunity for Gaelic Games. In turn, 60% requested additional learning opportunities in player development, 34% in physical fitness, 29% in health and lifestyle, 28% in performance analysis, 27% in nutrition and hydration and 26% in psychology (Horgan et al., 2021).

Coaches in Gaelic Games become more interested in these sports science related learning opportunities as they become more experienced in their practice (Horgan *et al.*, 2021). At the early stages of the player pathway, sports science and sport science practitioners can advise and support coaches to enhance participation and wellbeing through appropriate player development. At the later talent and elite stages, the practitioner works as part of an *interdisciplinary* team, often working directly with players to optimise development, wellbeing and performance as well as being a resource and source of advice for coaches.

Importantly, in Gaelic Games, the coach is the leader within the sporting environment. The coach should set the tone for the culture and philosophy for their broader management group, the team and individual players and, at relevant stages of the player pathway, with the sports science practitioner(s) (Webster et al., 2017). It is important that the coach and practitioner build a relationship and establish clarity around their respective roles. This is best facilitated through coach and practitioner education that addresses coach awareness, perceptions and understanding of the sports sciences as well as the practitioner's ability to integrate and communicate science into applied practice (Waters et al., 2019; Alfano and Collins, 2021a, 2021b; Schwarz et al., 2021). This is also developed through active learning and the interaction between the coach and the practitioner as they work to develop trusting, respectful relationships (see later section on 'Facilitating an Integrated Performance Approach').

The example below outlines a common challenge coaches may face and demonstrates how sport science can support and inform day to day coaching experiences and practice, and also, when relevant, how they may engage more directly with sports science practitioners. More examples will be presented over the duration of this guide.

#### **MULTI-SPORT PARTICIPATION**

Many young people participate in Gaelic Games in their schools, clubs, counties as well as taking part in other sports, which may result in year-round engagement in structured organised sport or a shift in emphasis across different sports at various times of the year.

Coaches must consider how to support the player and manage teams through such scenarios. There can be tension between the desire to improve performance in one sport while maintaining participation in another as well as maintaining balance in overall training load for the player.

The Player Pathway provides good initial direction for this scenario. At F1 and F2 (4-11 years), the coaches priority is participation and health with performance considered solely around the development of physical literacy (initiated at F1) and sport specific skills (initiated at F2). At F3 (age 12+), in the club setting, the emphasis should remain around participation, albeit with a slightly growing consideration of performance through age 15-16 into adulthood. In the talent pathway through to elite, participation remains important but performance begins to have a greater role to play.

#### A SPORTS SCIENCE PERSPECTIVE

Over training in Gaelic Games is associated with injury and other harmful outcomes and has been the subject of several Gaelic Games reports (Kelly and Lodge, 2018; Schlingermann et al., 2018; Duggan et al., 2022; Ryan, et al., 2023). However, playing many sports as a child and teenager does not appear to hinder the development of an elite athlete and in fact, has been linked with improved performance and long-term engagement in sports (DiSanti and Erickson, 2019; Güllich et al. 2022). In Gaelic Games, specialisation in one sport is not relevant to the club setting. Ultimately it is the responsibility of the coach potentially with the support of a qualified practitioner to show leadership and manage players through their respective engagement in sport, by adhering to key principles of training set out by Ryan et al., (2023).

Furthermore at the age of 16, young people may drop out from sport and/or may begin to increase time in one sport over others. Interestingly, decisions to drop out are linked to enjoyment of a particular sport and perceived competence in that sport (Crane and Temple, 2015; Bell *et al.*, 2016). These must remain central tenets of coaching in Gaelic Games to support retention and lifelong participation.

#### 3. A FRAMEWORK FOR SPORTS SCIENCE IN GAELIC GAMES

#### VISION FOR SPORTS SCIENCE PRACTICE IN GAELIC GAMES:

"Support healthy and holistic player development by facilitating players, coaches and parents/guardians to apply sport science in an integrated manner consistent with the values of Gaelic Games."

The provision of sports science supports across the player pathway is considered across three elements, with recommended best practice for all boys and girls, men and women who play Gaelic Games<sup>2</sup>:

- 1. 'What' support is appropriate?
- 2. 'Who' leads the provision of this support?
- 3. 'How' can the Gaelic Games system facilitate the delivery of this support?

Furthermore the following player centred principles will support the application of good practice in sports science across the pathway:

- 1. **Retain** coaching the game as the core of all activities, with sport science delivered with and through coaches.
- 2. **Support** all members to be active and healthy through Gaelic Games as a lifelong participant.
- 3. **Embed** sports science into existing player pathways specific to age groups.
- 4. **Ensure** Gaelic Games led activity is based on up-to-date scientific principles; always 'good' and aspires to 'best' practice.
- 5. **Emphasise** Inter-Disciplinary support teams.
- 6. Nurture and produce high performers.

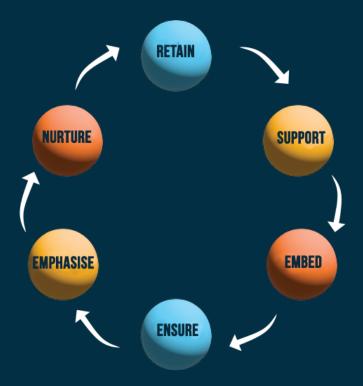


Figure 3: Principles for Sports Science in Gaelic Games

<sup>&</sup>lt;sup>2</sup> See Appendices - Sports Science Player <u>Pathway Cards</u>

#### A. FOUNDATION STAGES F1 - F3 CLUB

#### BUILDING SUSTAINABILITY & SELF-SUFFICIENCY

The goal for the delivery of sports science in the club setting is to build a long-term sustainable system which has the capacity to consistently deliver good practice from within their volunteer structure. The Gaelic Games system will strive to provide opportunities to educate, upskill and support the club volunteers to ensure this is achievable. The contribution of club coaches is hugely valued in Gaelic Games and it is important to note that best practice around sports science are recommendations only.

At F1 and F2 (4-11 years), the Gaelic Games workforce, coaches, parents, guardians and teachers are the main support providers to children as they develop their ability to move well and gain competence and confidence through involvement in sport and other activities. Indeed, participation in Gaelic games has been shown to make a significant contribution to WHO recommendations of at least 60 minutes of moderate-vigorous physical activity daily across the week for children and adolescents (Gavin et al., 2021). Enjoyment, variety, participation and wellbeing may be supported through the deployment of good coaching and consideration of basic sports science knowledge and practice. This includes the development of physical literacy, through fundamental movement and sports specific skills, healthy eating and a co-operative and positive environment that promotes good sportspersonship for young players.

This content can be delivered through coach development, and good collaboration between coaches and Healthy Club Officers ensuring the best possible environment for players at these Foundation stages. It is also important that clubs, coaches, parents/guardians and the Gaelic Games workforce emphasise and support the importance of 'free play' along with structured club activity and at certain times in the year, a break from structured activity to facilitate the broader holistic development of children and 'time' for parents/guardians and families to spend time (month and/or week) in other activities.

#### STRUCTURED ACTIVITY AND FREE PLAY

Clubs are keen to maintain player development through the organisation of structured activity through coaching sessions and games, which may result in year-round activity.

Parents, coaches and players give a significant amount of time to Gaelic Games and coaches in particular, note challenges associated with balancing coaching with other demands (Horgan et al, 2021).

#### A SPORTS SCIENCE PERSPECTIVE

The following is a general 'common sense' guide with some examples which has been adapted from Jayanthi and Dugas (2017) for coaches, parents and guardians regarding structured organised sport and 'free play':

- 1. The total hours of organised sports (training, practicing, competition, etc.) per week should be less than twice the number of hours playing sports just for fun (like playing with friends at break time or after school "free play") e.g., a player who participates in organised Gaelic Games for 6 hours and has 3 hours of "free play" during that same week by playing in the yard or school hall at break time and out on the local green or back garden with friends after school.
- 2. The total hours of organised sports (training, practicing, competition, etc.) per week should be less than or equal to a child's age in years (e.g., a 10-year-old who participates in Gaelic Games and swimming [total training, practices, and games] for only 8 hours during a typical week, not more than 10 hours).

As the child moves into the F3 youth phase (12–19), the priority for Gaelic Games remains that clubs are supported to become self-sustainable and self-sufficient in the context of sports science. At this stage it is important that adequate warmups are engaged with youth players, through the implementation of GAA15 (https://learning.gaa.ie/gaa15) or Activate (https://ulster.gaa.ie/activate). Also, a coach's basic understanding of growth related injuries and the load on each individual player is important and particularly so for those players involved in multiple sports environments (Bergeron *et al.*, 2015; Kelly and Lodge, 2018; Duggan *et al.*, 2022).

At this point, it is envisaged that an appropriate (coach or coaches) within a club have an F3 Level 1 Athletic Development (Youth) qualification (or equivalent) and therefore can oversee player and team development in this area. Clubs can consider monitoring participation and athlete development as they look to ensure retention, lifelong engagement and an active and healthy lifestyle for all players. It is also important that clubs have trained first aid responders and that these are available for training and games.

Staff training as well as coach, parent, guardian and player education can be used to ensure players develop good practice habits, an awareness and knowledge of the link between food, fluid and performance and health, as well as learning key psychological principles such as managing inter-personal relationships, basic mental skills for performance and developing desired player attributes (Dempsey et al., 2020). Performance analysis at this stage can be delivered by club coaches using tactics boards, photographs or videos of plays from adult intercounty or club games to help explain game concepts like being wide, or deep, or on 'the edge of the square' to young players.

Through the F3 adult (age 20+) phase, the goal for clubs remains to promote retention and ensure lifelong participation. Clubs can support and prepare players who enjoy competition and training in Gaelic Games as well as those who would like to remain active through Gaelic Games into adulthood. There are provisions for this for male and female members including Gaelic4Mothers&Others, Camán n Chats, and GAA Dads & Lads.

Clubs and coaches should be supported to understand and implement player development inputs informed by evidence-based sports science. This will require bespoke coach development opportunities and on occasion, some engagement with specialist practitioners. Specifically, at F3 adult level, as well as first aid responders for training and games, club players should have access to qualified physiotherapists and/or athletic therapists for the treatment of injuries sustained through their participation in Gaelic Games. In addition, suitably qualified athletic development coaches in the club who have completed bespoke Gaelic Games athletic development coach education or its equivalent can be embedded in coaching teams. Coaches in the club may also partake in video or notational analysis to gain a better understanding of performance at this level, to be shared to players in a positive learning environment. Clubs should encourage coaches within their club to avail of the new coach pathway, which currently includes performance analysis and athletic development and will in time include additional learning opportunities in athletic development, nutrition, sport psychology and skill acquisition.

In line with the principle that clubs should be self-sufficient and self-sustainable in the long term, clubs are encouraged to engage with existing expertise in the broader club and community, and existing and new coach development opportunities to provide specialist sports science support, if and when it is needed. If clubs are engaging with external specialists, they should consider the best practice recommendations that are presented for T3, T4 and Elite phases of the pathway.

#### **B. TALENT STAGES T1 - T4**

A player is considered to be in the Talent (T) stage of the pathway if they are participating in player development activities at county level (player development squads) as well participating with their club and school. Throughout the Talent phase, much of the role of coaches, players, teachers and eventually sports science specialists is to support players involved in multiple teams. It is important, during this Talent Phase, to expose players to, and support players through different and changing experiences and environments for their holistic development as people and players (Fletcher and Sarkar, 2016; Henriksen and Stambulova, 2017; Collins and MacNamara, 2017; Collins, MacNamara and Cruickshank, 2019) and for players to begin to receive some basic exposure to player development and sports science inputs in a player centred approach (Dempsey *et al.*, 2020; LGFA, 2022).

#### Good Practice Recommendations | T1 - T4 Stages

T1 is focused on a player's initial involvement with external development opportunities (i.e. school and player development/academy or intercounty squads) as well as within the club environment, at early adolescent age level. In light of the large variation in growth and maturation at this age (Cumming et al., 2017; Ryan et al., 2022) and the weak relationships between youth and adult performance (Barreiros et al. 2014) it is recommended that as many players as possible within a county would have the opportunity to experience some or all elements of the development programme over these two years.

T2 is focused on player's involvement at school's junior level and development opportunities outside of the club environment at mid adolescent age level including player development/academy/intercounty squads. T3 typically incorporates senior schools and intercounty minor involvement and therefore, additional consideration of training load management and the input of sports science specialists to deliver player development supports. T4 may include third level participation, which if overlapping with intercounty involvement, will again require monitoring of training load and player wellbeing by sports science practitioners working within or across both environments.

Throughout this T phase, at a minimum, there should be first aid responders available for training and games, as well as access to qualified physiotherapists and/or athletic therapists for the treatment of injuries. At both T1 and T2, Level 1 Athletic Development Youth coaches (or its equivalent) may support the delivery of this integrated development as well as offering an understanding of training load, growth and maturation and basic athletic profiling. At T3 and T4, athletic development coaches should be looking to progress to the Gaelic Games Level 2 AD accreditation (or its current equivalent) to ensure appropriate delivery of this content. In addition, throughout the Talent Phase, it is recommended that athletic development should be overseen by a county level performance lead in time who is accredited to Gaelic Games Level 3 AD or its equivalent. This county level performance lead, with parental approval, may also begin to coordinate the delivery of nutrition and sport psychology content, all administered mainly by coaches at T1-T2 and suitably qualified sports science practitioners at T3-T4 with the ultimate goal of providing expertise which enhances the health and performance of players and supports and informs the decision-making of coaches.

A key objective for all coaches and practitioners involved in this stage is to empower players to take greater ownership of the development of athleticism, skill, and a healthy lifestyle. Six interacting and connected attributes have been identified that lie at the heart of a player's Gaelic Games DNA (Dempsey et al., 2020). They are passion, respect, responsibility, commitment, resilience, and creativity and all are important in ensuring both the player and the person reach their full potential. Sports science inputs to support the development of these may include, but are not limited to, developing good practice habits, enhanced understanding of the impact of food and fluid on performance, nurturing reflective players on their own performance and team role, and establishing a consistent psychological approach for managing and balancing the increasing training and competition demands with education and home life, while also paying attention to physical and mental recovery.

Finally, if groups during this are engaging with external specialists during T1-T2, it is recommended that they consider best practice recommendations for practitioners that are presented for T3, T4 and E stages.

#### C. ELITE/HIGH PERFORMANCE (E STAGE)

#### **Good Practice Recommendations**

At this level, the player is exposed to specialists to help them manage the demands of intercounty training and match day performance. In addition to athletic and skill development, nutrition, injury management, sport psychology, and performance analysis supports and inputs, the player should be supported to balance their personal, professional and sporting commitments. As a result, at this stage of the pathway there should be a shared understanding of player development inputs, overseen by the lead coach, who works with sports science practitioners. It is important at this stage that these practitioners are suitably qualified and experienced to support coaches and players. Best practice recommendations are presented on the pathway guide and summarised below.

For athletic development, the practitioner should be, in time, accredited to Gaelic Games Level 3, or its equivalent, typically a postgraduate qualification with external accreditation, as well as having experience in a Gaelic Games setting. For nutrition, the practitioner should be accredited with INDI/SENR/AfN and have demonstrable applied sports nutrition experience.

Physiotherapy and rehabilitation professionals should have CORU/HCPC/ISCP/CSP/ARTI accreditation and musculoskeletal experience. For sport psychology at senior intercounty level, practitioners should have a minimum of an MSc in Sport/Exercise Psychology, be accredited with a relevant sport science or psychology professional body, and hold divisional membership of PSI/BPS/BASES/FEPSAC. Skill acquisition specialists may also be recruited to support coaches and players. Finally, performance analysis practitioners should be Gaelic Games Accredited, ideally Level 3 or 4. All practitioners should be Garda vetted and have completed the Gaelic Games or Sport Ireland Safeguarding.

At this stage of the player pathway, there are other specific considerations around contact hours and sports science practitioner working in interdisciplinary teams with coaches/managers;

#### **Optimising 'Contact' Hours**

Reports conducted by the ESRI (Kelly *et al.*, 2018; Kelly, Keegan and Walsh, 2019) and WGPA (2020) highlighted the time commitment of players to their intercounty team. The table below outlines some of the key insights across male and female players.

	MALE PLAYERS	FEMALE PLAYERS
Group Sessions per week	3.9 - 4.9 (match/non-match)	3.4
Individual Sessions per week	1.5 - 1.9	2.2
Total Sessions per week	5.4 - 6.8	5.6
Professional Commitments (% of Day)	33	31
Sleep (% of Day)	31	34
Discretionary Time (% of Day)	10	17
County Games/Training Travel Time (% of Day)	9	5
County Training Time (% of Day)	12	13
County Gear/Food Prep (% of Day)	4.5	-

**Table 1:** Percentage of time taken per day on various intercounty related activities as reported by Male and Female players

Female players spent more time in discretionary activities, which may be linked to the high proportion of students in the female playing group (females; 55% incl 12% secondary school, males; ~33% - GPA Student Report, 2019). Females also report lower travel time perhaps due to 8% of females being resident outside of their county full time, compared to 24% of male players. Finally, female players spend 3.7 hours per day (18% of day) on county commitments (travel and training). This compares to 6 hours (25% of day) in male players, which includes a 5% (approx. 1 hour) time allocation for food and gear preparation. This was not addressed explicitly in the female analysis and may be reflected in 'discretionary' time. The specific allocation for training time for male players at 12% is comparable with the female equivalent of 13%.

In addition, ~76% of female players are so tired from the mental and physical demands of being a county player that they struggle to work/study while for male players, a lower proportion than the general male population in Ireland wake up feeling 'fresh and rested.' Approximately 97% of all players feel their intercounty commitments take up a lot of time. 85% of female players need flexibility in their job to play intercounty Gaelic Games while 48% of male players would like to spend more time on their professional career but their intercounty commitments prevents them from doing so. Finally, approximately 7% of male and female players would like to spend more time with their county team.

In light of the aforementioned commitments there is a need for stronger system of education and supports for administrators, players, coaches and support team members involved in the E (Elite Intercounty level) to better support their roles and within the context of environment they operate in.

Furthermore, the data outlined in Table 1 indicates the need for a training load policy for intercounty players which should be developed using input from science and evidence from current practice. This policy should include guidelines/recommendations on;

Furthermore the following player centred principles will support the application of good practice in sports science across the pathway:

- 1. **Number of collective field** and **gym-based sessions per week**, relative to stage of season with consideration of individual player circumstances;
- 2. Format and number of individual (including athletic development) sessions per week, relative to stage of season;
- 3. Format for delivery of sports science input (nutrition, sport psychology, performance analysis, physiotherapy/rehabilitation, skill acquisition and athletic development);
- 4. Established rest and recovery periods supported by training and fixture scheduling;
- 5. Specific considerations for players involved in multiple teams, particularly at T4/Elite phases.

#### FACILITATING AN INTEGRATED PERFORMANCE APPROACH (T3-T4/E)

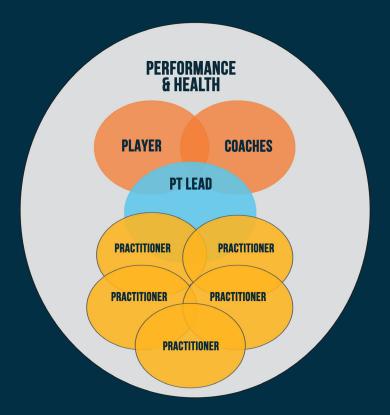
"Integration is the process of combining small components into a single system so they function as a cohesive, singular unit" (Sporer and Windt, 2018a p. 1)

At T3, T4 and more commonly, at the E (Elite) stages of the player pathway, healthy and holistic player development is often facilitated through an interdisciplinary support team environment where coaches and various sports science practitioners work together to support and develop players (Dempsey et al., 2020). The contribution and value of county administrators in creating this environment is significant and it is important that there is a positive, transparent, and collegial relationship between administrators and the IDT. This can be developed through open communication, role clarity and inclusion of administrators in the culture created by the IDT. Regardless of the number of coaches or sports science practitioners, typically of lower magnitude in T3/T4, IDT environments will present different and informed perspectives about players and their holistic development.

IDTs work best when coaches and sports science practitioners adopt interdisciplinary thinking (IDT) where knowledge from each discipline is integrated to enhance wellbeing and performance. Coaches and athletes will benefit from this approach where different specialists work to one collective player development plan rather than perceiving that solutions exist in one discipline only. This interaction of specialists within a performance support team structure is linked to reduced injury and enhanced performance (Tee, Till and Jones, 2018). One member of the backroom team should act as the lead facilitator of this performance team ensuring clarity of roles, responsibilities, collaboration and delivery to ensure the best environment possible for all.

Figure 4 (adapted from Sporer and Windt, 2018) presents a recommended operational model for IDT in a Gaelic Games context. The players are the key anchors of this model with the various sports science practitioners working in an integrated manner to bring informed inputs on optimising player development and performance. There are some important considerations and principles which are appropriate to all contexts in Gaelic Games that can support this model;

- 1. Sharing a value system and player centred culture among all team members, focused on maintaining the health and optimising the development and performance of players in an enjoyable and challenging environment (Alfano and Collins, 2021b, 2021a);
- Adopting a flat organisational structure, led by the coach/manager can ensure that all sports science practitioners are valued;
- 3. Accruing and valuing skill sets where suitably qualified and experienced sports science practitioners are recruited and context is considered in determining roles and responsibilities amongst practitioners for different decisions;
- **4.**Sports science practitioners must work to communicate their messages in a consumable format for ALL stakeholders (e.g. players, parents/guardians, coaches and other support team members), working within and respecting the coaching process;
- **5.** Operationally, defined qualification/accreditation standards, role clarity, regular meetings, access to accurate and consistent data and acceptance of shifting responsibility for decisions will help to achieve a high performing support team around the players and the team.



**Figure 4:** Adapted from Sporer and Windt, 2018. An integrated performance support consisting of the player, coaches and sports science and medicine practitioners (practitioner team)

The case studies below indicate IDT working within different contexts and recommends who should lead decision making in each case.

#### CASE STUDY 1: LEAVING CERT CLUB PLAYER

The coach engages with the player and parent and if relevant, requests the advice of club athletic development support to develop a training plan for the player that reflects participation in multiple teams/sports and balance with education.

#### **CASE STUDY 2: T4 MULTI-TEAM PLAYER**

The athletic development coaches with input from physio/rehab specialists and nutritionist should collaborate to present one training plan for the player that is shared with the coaches of all relevant teams.

#### CASE STUDY 3: INJURED INTERCOUNTY PLAYER

The physio/rehab specialist with input from the nutritionist, psychologist and athletic development (AD) coach should guide the decision making around the injured player. As the injury improves, the AD coach with continued input from the physio/rehab, nutritionist and psychologist will lead rehabilitation and return to play. Interdisciplinary working among the practitioners is important, in order to present a coherent plan for the player and coach.

#### DEVELOPING AND SUPPORTING SPORTS SCIENCE IN GAELIC GAMES (2023-2030)

As we look towards the future, player-centred action is proposed around three core areas in order to develop and support sports science provision across Gaelic Games.

#### 1. COACH DEVELOPMENT:

It is incumbent on all key stakeholders to continue to seek understanding and clarity on how sport science can better inform day to day player and coaching experiences and practice, and also, when relevant, how they may engage more directly with sports science practitioners. Coach development exists for athletic development and performance analysis in Gaelic Games but over time, there should be a greater provision of integrated and bespoke learning opportunities within the new coach learning space across the sports science disciplines, targeted to coach developers, coaches and current/former players. It is also recommended that sports science related content in current coach education should be reviewed and revised in light of this guide.

#### 2. GAELIC GAMES SYSTEM

The Gaelic Games Associations have additional personnel and stakeholder engagement activity around the area of player development at national and regional level. However, it remains important to continue to support the development of a governance and quality assurance structure for sports science, and to integrate sports science into decision making, nationally and in counties to include;

- (i) Development, recruitment, and operation of cross code/gender performance leads at county level who, through working with national units, will;
  - a. ensure a holistic approach to sport science in counties that considers participation, wellbeing and performance,
  - b. co-ordinate and provide club and coach education for sport science,
  - c. oversee and participate in the implementation of sports science in the talent pathway,
  - d. oversee the delivery of sports science supports for elite intercounty teams.
- (ii) An organisation wide support/education programme for the delivery and recruitment of sports science/practitioners for stakeholders, such as county board officers, team managers and parents.
- (iii) An updated/new player and/or manager charter to develop quality assurance in recruitment and delivery of sports science at elite levels,
- (iv) Integration of sports science into decision making, particularly around games programmes and ensuring adequate rest and recovery periods for players and coaches,
- (v) A coherent data management, and research plan for sports science in Gaelic Games.

#### 3. SPORTS SCIENCE PRACTITIONERS

There are examples of good practice for practitioner support and development across Gaelic Games. Performance analysis have an established education, accreditation system and a community of practice. There are also resources and learning opportunities for practitioners and a commitment to research activity to enhance knowledge and practice around Gaelic Games. Additional support could include;

- (i) Establishing recruitment protocols, role profiles and reporting structures for practitioners in elite as well as the T3 and T4 stages,
- (ii) Developing discipline specific Gaelic Games accreditation pathways (or link in with National Accreditation initiative across NGBs and Sport Ireland),
- (iii) Building a community of practice system across Gaelic Games where there is a collective goal to develop participation and performance in and across disciplines, and support practitioner wellbeing,
- (iv) Develop bespoke Gaelic Games resources and guidelines for sports science.

As advocated by Young and colleagues, there is a need to work smarter with the interest of the players at heart (Young and McNicholl, 2020). The challenge across Gaelic Games codes is how we can harness good practice in coaching and sports science, exciting advancements in technology as well as the undisputed commitment from Gaelic Games staff, managers, coaches and sports science practitioners, without adding unwarranted stress and strain on players.

This national vision and framework aspires to provide clarity and evidence-informed guidance around what sustainable good practice for sports science in Gaelic Games looks like and how it may be experienced at each stage of the player pathway. The critical component which must follow on from this are the meaningful actions and accessible learning opportunities to better support all stakeholders. This should ensure a more equal, enjoyable, fair, supportive and appropriate experience for all players in Gaelic Games.

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## F1

PAIH WAY	WILATO	WILLOO	HOMO
	WHAT?	WHO?	HOW?
ATHLETIC Development	<ul> <li>Simple movement challenges, FMS development, co-operative games.</li> <li>Purposeful play and enjoyment with appropriate content delivered mainly through warm ups and integration into sessions.</li> <li>Understanding of the Relative Age Effect.</li> <li>Encourage participation in other sports and activities and unstructured play.</li> <li>Encourage a minimum of 1 rest day from structured training per week</li> </ul>	<ul> <li>Coaches, parents/guardians, teachers.</li> <li>Club Coach(es) with AD Coach Level 1 (F1-F2) Qualification or equivalent can lead delivery.</li> </ul>	<ul> <li>Coach Development and Parent/Guardian Education - AD Coach Level 1 (F1-F2) Course.</li> <li>Additional online/face to face resources and education.</li> </ul>
NUTRITION	Healthy eating based around the plate model.	Coaches, parents/guardians, teachers, Healthy Club Officer.	<ul> <li>Coach Development and Parent/Guardian Education.</li> <li>Linking with recognised partners and existing education supports to develop appropriate education, online/face to face.</li> </ul>
SPORT PSYCHOLOGY	Co-operation and socialisation, sportspersonship.	Coaches, parents/guardians, teachers, Healthy Club Officer.	Coach Development and Parent/Guardian Education.
PHYSIOTHERAPY & REHABILITATION	FMS, co-operative games and enjoyment.	Coaches, parents/guardians, teachers.	Coach Development and Parent/Guardian Education.
SKILL ACQUISITION	Broad development of FMS* and FGS* to facilitate future engagement in sports and love of participation.	Coaches, parents/guardians, teachers.	Coach Development, Coach Developer Support, Parent/Guardian Education.

\*FMS = Fundamental Movement Skills

\*FGS = Fundamental Game Skills

GAELIC	GAMES
PLA	YER
PATH	WAY

## **F2**

<b>PATHWAY</b>	WHAT?	WHO?	HOW?	
ATHLETIC DEVELOPMENT	<ul> <li>Simple movement challenges, FMS development, co-operative games.</li> <li>Purposeful play and enjoyment with appropriate content delivered mainly through warm ups and integration into sessions.</li> <li>Understanding of the Relative Age Effect.</li> <li>Encourage participation in other sports and activities and unstructured play.</li> <li>Encourage a minimum of 1 rest day from structured training per week</li> <li>Total hours of organised sports (training, practicing, competition, etc.) per week should be less than or equal to a child's age in years.</li> </ul>	<ul> <li>Coaches, parents/guardians, teachers.</li> <li>Club Coach(es) with AD Coach Level 1 (F1-F2)         Qualification or equivalent can lead delivery.</li> </ul>	<ul> <li>Coach Development and Parent Guardian Education - AD Coach Child F1 - F2 Level.</li> <li>Additional online/face to face resources and education.</li> </ul>	
NUTRITION	Healthy eating based around the plate model.	Coaches, parents/guardians, teachers, Healthy Club Officers.	<ul> <li>Coach Development and Parent/Guardian Education.</li> <li>Linking with recognised partners and existing education supports to develop appropriate education, online/face to face.</li> </ul>	
SPORT PSYCHOLOGY	Co-operation and socialisation, sportspersonship.	Coaches, parents/guardians, teachers, Healthy Club Officer.	Coach Development and Parent/Guardian Education.	
PHYSIOTHERAPY & REHABILITATION	FMS, co-operative games and enjoyment.	Coaches, parents/guardians, teachers.	Coach Development and Parent/Guardian Education.	
SKILL ACQUISITION	Broad development of FMS and FGS to facilitate future engagement in sports and love of participation.	Coaches, parents/guardians, teachers.	Coach Development, Coach Developer Support, Parent/Guardian Education.	

## GAELIC GAMES PLAYER PATHWAY

## F3 / YOUTH

P/AI HW/AY	WHAT?	WHO?	HOW?
ATHLETIC DEVELOPMENT	Homebased sessions/warm ups/athletic development sessions focusing on movement, technique, speed and strength.  Integrated Conditioning. Introduce Planning and Periodisation.  Basic readiness and workload monitoring with clear follow-up process.  Nov-March: 2-3 integrated/AD units, 3 week on/1 week off. April-Sept: 1-2 integrated/AD units, 3 weeks on/1 week off.  Assessments - Standardised Fitness Tests & Player Profiles.  Review RAE, Review Maturation Bias.	Club Coaches and Club AD Coach with AD Coach Level 1 (F3 Youth) or equivalent.	Coach Development - AD Coach F3 Youth Level 1.      Additional online/face to face resources and education.
NUTRITION	Awareness and knowledge of how to nurture the benefits of physical activity through sport to health, specific to males and females.	Coaches, parents/guardians, teachers, Healthy Club Officers.	Coach Development and Parent/ Guardian Education.  Linking with recognised partners and existing education supports to develop appropriate education, online/face to face.
SPORT PSYCHOLOGY	Wellbeing, coping and relationship building skills.     Intro to 5Cs: Confidence, Commitment, Communication, Control, Concentration.	Coaches, Healthy Club Officer.	Coaches/In Club Expertise.
PERFORMANCE ANALYSIS	Support the development of reflective player who can understand basic feedback to enhance technical and game sense abilities.	Coaches.	Intro to PA module, PA Guide for Practice.
PHYSIOTHERAPY & REHABILITATION	Education: Osgood Schlatters, Severs Disease, Growth plate injuries, Growth & Maturation.     Load management across different sports.     First aid support.	Coaches, parents/guardians and players.	Coach Development and Parent/ Guardian and Player Education.
SKILL ACQUISITION	Support the development of a reflective player who can apply basic feedback to enhance their skilled performance. Understand the basics of effective practice, both within and outside of organized sessions.	Coaches.	Coach Development     A Coach Developer, Mentor, Coach, or Skill Acquisition Specialist may also facilitate individual mentoring or a Community of Practice.

## ATHLETIC DEVELOPMENT Workload Principles:

- Be aware of the players total workload, across all sessions. This could include what the player is doing with the club/ school/county and any other sports/ activities and organisations they may be involved with.
- Provide guidance and support to players who are over trained and under trained.
- Be aware of spikes in the players workloads. This can increase their risk of injury.
- Taper the players workload in the lead into important games as this may help optimise performance.
- 5. Avoid\*:
  - Completing two high intensity activities in the one day.
  - · Playing two full games within 60 hours.
  - Completing high intensity activities on two consecutive days.
- Encourage windows and opportunities for unstructured free play activities during the players week.
- 7. Encourage a minimum of one day off from structured activity per week.
- Help players to understand these workload principles and encourage them to communicate with the coach.
- Encourage involvement in a variety of activities/sports. As the player gets older, the number of activities will decrease. Coaches should work together to manage activity across different sports/ teams using these workload principles.

GAELIC GAMES
PLAYER
PATHWAY

### **T1**

PATHWAY	WHAT?	WHO?	HOW?
ATHLETIC DEVELOPMENT	Homebased Sessions/Warm Ups/ Athletic Development Sessions focusing on Movement, Technique, Speed & Strength.  Integrated Conditioning. Introduce Planning and Periodisation.  Basic Readiness and Workload Monitoring with clear follow-up process.  Nov-March: 1 integrated/AD unit, school holidays off, 3 week on/1 week off. April-Sept: 1-2 integrated/AD units, school holidays off, 3 weeks on/1 week off.  Assessments - Standardised Fitness Tests & Screens, Review RAE*, Review Maturation Bias.	Coaches AD Coach Level 1 (F3 Youth)/Sports Science Related Qualification.	Coach Development - AD Coach Level 1 (Youth F3).  Additional online/face to face resources and education.
NUTRITION	Awareness and knowledge of link of food and fluid to health and performance, specific to male and female players.	Coaches, parents/guardians, teachers, role models, third level 'Nutrition' students.	Coach Development and Online Education Supports.
SPORT PSYCHOLOGY	Wellbeing coping skills for life, sport and education.     Introduction to mental skills training: goal setting, routines, relaxation and reflection.	Coaches (Referral for mental health issues).	Coach Development.
PERFORMANCE ANALYSIS	Support the development of reflective player who can understand basic feedback to enhance technical and game sense abilities.	Coaches.	Intro to PA module, PA Guide for Practice.
PHYSIOTHERAPY & REHABILITATION	Warm ups.  Education on: RED-S*, ACL, adolescent hip, adolescent spine, concussion awareness, load management across sports, injury management.  First aid support.	Coaches, parents/guardians and players, specialist support.	Coach Development and Parent/Guardian and Player Education.
SKILL ACQUISITION	Develop awareness of the complementarity of play and practice, and of Gaelic Games and other sport participation, for skill development.	Coaches and/or former players who have completed mentoring training.	Coach Development, Coach Developer Support. Additional online/face to face resources and education. Player Mentor Training.

## ATHLETIC DEVELOPMENT Workload Principles:

- Be aware of the players total workload, across all sessions. This could include what the player is doing with the club/ school/county and any other sports/ activities and organisations they may be involved with.
- Provide guidance and support to players who are over trained and under trained.
- Be aware of spikes in the players workloads. This can increase their risk of injury.
- Taper the players workload in the lead into important games as this may help optimise performance.
- 5. Avoid\*:
  - Completing two high intensity activities in the one day.
  - · Playing two full games within 60 hours.
  - Completing high intensity activities on two consecutive days.
- Encourage windows and opportunities for unstructured free play activities during the players week.
- 7. Encourage a minimum of one day off from structured activity per week.
- Help players to understand these workload principles and encourage them to communicate with the coach.
- Encourage involvement in a variety of activities/sports. As the player gets older, the number of activities will decrease. Coaches should work together to manage activity across different sports/ teams using these workload principles.

\*RAE = Relative Age Effect
\*RED-S = Relative Energy Deficiency

GAELIC GAMES
PLAYER
<b>PATHWAY</b>

## **T2**

<b>PATHWAY</b>	WHAT?	WHO?	HOW?
ATHLETIC DEVELOPMENT	Homebased Sessions/Warm Ups/ Athletic Development Sessions focusing on Movement, Technique Speed, Strength & Endurance. Integrated Conditioning. Introduce Planning and Periodisation. Basic readiness and workload monitoring with clear follow-up process.  Nov-March: 1-2 integrated/ AD units, school holidays off, 3 week on/1 week off. April-Sept: 1-2 integrated/ AD units, school holidays off, 3 weeks on/1 week off.  Assessments - Standardised Fitness Tests & Screens, Review RAE, Review Maturation Bias.	Lead Coach with Coach AD Level 2 and support coaches with Coach AD Level 1 (F3 Youth)/Sports Science Related Qualification.      Oversight by County AD/Performance Lead (Coach AD Level).	Coach Development - AD Coach Level 1 (F3 Youth), AD Level 2 and AD Level 3.  Additional online/face to face resources and education.
NUTRITION	Awareness and knowledge of link of food and fluid to health and performance, specific to male and female players.	Coaches, parents/guardians, teachers, role models, third level 'Nutrition' students.	Coach Development and Online Education Supports.
SPORT PSYCHOLOGY	Wellbeing coping skills for life, sport and education.     Further mental skills training: confidence building, self-talk, emotional regulation. Awareness of gender differences in peer & social relationships.	Coaches (Referral for mental health issues).	Coach Development.
PERFORMANCE ANALYSIS	Support the development of a reflective player who can apply basic feedback to enhance their technical abilities and games sense.	Coaches.	Intro to PA module, PA Guide for Practice.
PHYSIOTHERAPY & REHABILITATION	<ul> <li>Warm ups and education on RED-S, ACL*, adolescent hip, spine, concussion awareness, load management across sports, injury management.</li> <li>First aid support.</li> </ul>	Coaches, parents/guardians and players, specialist support.	Coach Development and Parent/Guardian and Player Education.
SKILL ACQUISITION	<ul> <li>For players, development of effective practice techniques in the context of individual and group training.</li> <li>For coaches, individual review of design (e.g. selection and sequencing of practice activities), delivery (e.g. instruction and feedback), and evaluation (e.g. testing procedures) covering generic topics.</li> </ul>	<ul> <li>Coaches support players.</li> <li>Skill Acquisition Specialist, Coach Developer, or Mentor Coach supports coaches.</li> </ul>	<ul> <li>Coach Development, Coach Developer Support.</li> <li>Additional online/face to face resources and education.</li> <li>Player Mentor Training.</li> </ul>

## ATHLETIC DEVELOPMENT Workload Principles:

- Be aware of the players total workload, across all sessions. This could include what the player is doing with the club/ school/county and any other sports/ activities and organisations they may be involved with.
- Provide guidance and support to players who are over trained and under trained.
- Be aware of spikes in the players workloads. This can increase their risk of injury.
- Taper the players workload in the lead into important games as this may help optimise performance.
- 5. Avoid\*:
  - Completing two high intensity activities in the one day.
  - Playing two full games within 60 hours.
  - Completing high intensity activities on two consecutive days.
- Encourage windows and opportunities for unstructured free play activities during the players week.
- 7. Encourage a minimum of one day off from structured activity per week.
- Help players to understand these workload principles and encourage them to communicate with the coach.
- Encourage involvement in a variety of activities/sports. As the player gets older, the number of activities will decrease. Coaches should work together to manage activity across different sports/ teams using these workload principles.

\*ACL = Anterior Cruciate Ligament (Knee injury)

GAELIC GAMES PLAYER PATHWAY
ATHLETIC DEVELOPMENT
NUTRITION
SPORT PSYCHOLOGY

ATHWAY	WHAT?	WHO?	HOW?
ATHLETIC DEVELOPMENT	Homebased Sessions/Warm Ups/ Athletic Development Sessions focusing on Movement, Speed, Strength, Power & Endurance.  MC and Integrated Conditioning. Include Planning and Periodisation and Maturation.  Monitor Readiness and Workload, Time and RPE with clear follow-up process.  Nov-March: 2-3 integrated/AD unit, school holidays off, 3 week on/1 week off. April-Sept: 1-2 integrated/AD units, school holidays off, 3 weeks on/1 week off.  Assessments - Standardised Fitness Tests & Screens, Review RAE, Review Maturation Bias.	AD Coach Level 2/Masters in Sports Science Area.     Oversight by County AD/Performance Lead (Coach AD Level 3/Masters in Sports Science related area plus practical accreditation).	Coach Development - AD Coach Level 1 (F3 Youth), AD Level 2 and AD Level 3. Additional online/face to face resources and education. IDT* support.
NUTRITION	Understanding and application of link of food and fluid to health and performance, specific to male and female players.	Nutritionist in IDT (MSc Nutrition, accred SENR/AfN/INDI, 1 year experience) through Training Camp Workshops, 1-2-1 with identified players.	Stakeholder Support, IDT Support, Practitioner Database.
SPORT PSYCHOLOGY	Wellbeing coping skills for life, sports and education.     Advanced mental skills training: imagery skills, attentional control, consistency, giving and receiving feedback, cohesion and leadership.	Coaches. Sport Psychologists (MSc in Sport Psych, accred/pursuing accred, min 1 year experience) through Training Camp Workshops.	Coach Development.
PERFORMANCE ANALYSIS	Support the development of a reflective player who can apply constructive feedback to enhance their technical abilities and games sense.	Coach supported by the Performance Analyst with IDT through coach-practitioner meetings.	Coach Development, Stakeholder Support, IDT Support, Practitioner Database.
PHYSIOTHERAPY & REHABILITATION	On Site delivery of physio/rehab with IDT.  Movement and injury screening.  Injury prevention and education workshops.  Injury surveillance.	CORU/ISCP/HCPC/ARTI*     Accreditation+ 2 yrs Exp in MSK*,     Level 8 degree.	Gaelic Games Accrediation for Practitioners.     Database of Accredited Practitoners.     Stakeholder Support, IDT Support.
SKILL ACQUISITION	For players, development of effective practice techniques in the context of individual and group training.  For coaches, individual review of design (e.g., selection and sequencing of practice activities), delivery (e.g., instruction and feedback), and evaluation (e.g., testing procedures) covering generic topics.	Coaches and/or former players who have completed mentoring training support players. Skill Acquisition Specialist, Coach Developer, or Mentor Coach supports coaches.	Coach Development, Coach Developer Support. Additional online/face to face resources and education. Player Mentor Training.
: Interdisciplinary team   *MSK = Musculoskeletal   *C	CORU/ISCP/HCPC/ARTI = accrediting bodies for physio/	rehab specialists	

#### ATHLETIC DEVELOPMENT **Workload Principles:**

- 1. Be aware of the players total workload, across all sessions. This could include what the player is doing with the club/ school/county and any other sports/ activities and organisations they may be involved with.
- 2. Provide guidance and support to players who are over trained and under trained.
- 3. Be aware of spikes in the players workloads. This can increase their risk of injury.
- 4. Taper the players workload in the lead into important games as this may help optimise performance.
- 5. Avoid\*:
  - · Completing two high intensity activities in the one day.
  - · Playing two full games within 60 hours.
  - · Completing high intensity activities on two consecutive days.
- 6. Encourage windows and opportunities for unstructured free play activities during the players week.
- 7. Encourage a minimum of one day off from structured activity per week.
- 8. Help players to understand these workload principles and encourage them to communicate with the coach.
- 9. Encourage involvement in a variety of activities/sports. As the player gets older, the number of activities will decrease. Coaches should work together to manage activity across different sports/ teams using these workload principles.

GAELIC GAMES	
PLAYER	
<b>PATHWAY</b>	7

<b>PATHWAY</b>	WHAT?	WHO?	HOW?
ATHLETIC Development	Homebased Sessions/Warm Ups/Athletic Development Sessions focusing on Movement, Speed, Strength, Power & Endurance.  MC & Integrated Conditioning, Planning and Periodisation.  Quality Readiness and Workload Monitoring (Online system plus workload monitoring plus GPS) with clear follow-up process.  Nov-March: 2-3 integrated/AD units, School/College holidays off, 3 week on/1 week off. April-Sept: 1-2 integrated/AD units, 3 weeks on/1 week off.  Assessments - Standardised Fitness Tests and Player Profiles.	AD Coach Level 2 with County AD/ Performance Lead (AD Level 3/ Masters in Sports Science related area) and IDT.	Coach Development - AD Coach Level 2 and AD Level 3. Additional online/face to face resources and education.
NUTRITION	Bespoke training and game day, and injury related nutrition and hydration practices.	Nutritionist (in IDT) (MSc Nutrition, accred SENR/AfN/INDI*, 1 year experience) through Training Camp Workshops, 1–2–1 with identified players.	Stakeholder Support, IDT Support, Practitioner Database.
SPORT PSYCHOLOGY	Awareness, recognition and signposting of mental health.     Performance evaluation, lifeskils/dual career, pressure training, distraction control, contingency planning, wellbeing monitoring, cohesion and leadership.	Coaches, Managers. Sport Psychology Consultant (in IDT) (MSc in Sport Psych, accred/pursuing accred, min 1 year experience) through Team & 1:1 Psychology Support.	Coach/Manager Development, Stakeholder Support, IDT Support, Practitioner Database.
PERFORMANCE ANALYSIS	The delivery of agreed team analysis in a way that facilitates enhanced player and team analysis, reflection and decision making.	Coach & player led supported by the Performance Analyst (with IDT) through coach-practitioner meetings	Coach Development, Stakeholder Support, IDT Support, Practitioner Database.
PHYSIOTHERAPY & REHABILITATION	On Site delivery of physio/rehab with IDT.  Movement and injury screening.  Injury prevention and education workshops.  Injury surveillance.	CORU/ISCP/HCPC/ARTI Accreditation+ 2 yrs Exp in MSK, Level 8 degree.	Gaelic Games Accrediation System for Practitioners.     Database of Accredited Practitoners. Gaelic Games Injury     Surveillance System.     Stakeholder Support, IDT Support.
SKILL ACQUISITION	For players, development of advanced effective practice techniques in the context of individual and group training.     For coaches, individual review of design, delivery, and evaluation covering bespoke topics.	Coaches and/or former players who have completed mentoring training.     Additional support by skill acquisition specialist (in IDT).	Coach Development, Coach Developer Support.  Additional online/face to face resources and education.  Player Mentor Training.  IDT Support, Practitioner Database.
*SENR/AfN/INDI = Accrediting bodies for nutrition specialists			

#### ATHLETIC DEVELOPMENT **Workload Principles:**

- 1. Be aware of the players total workload, across all sessions. This could include what the player is doing with the club/ school/county and any other sports/ activities and organisations they may be involved with.
- 2. Provide guidance and support to players who are over trained and under trained.
- 3. Be aware of spikes in the players workloads. This can increase their risk of injury.
- 4. Taper the players workload in the lead into important games as this may help optimise performance.
- 5. Avoid\*:
  - · Completing two high intensity activities in the one day.
  - · Playing two full games within 60 hours.
  - Completing high intensity activities on two consecutive days.
- 6. Encourage windows and opportunities for unstructured free play activities during the players week.
- 7. Encourage a minimum of one day off from structured activity per week.
- 8. Help players to understand these workload principles and encourage them to communicate with the coach.
- 9. Encourage involvement in a variety of activities/sports. As the player gets older, the number of activities will decrease. Coaches should work together to manage activity across different sports/ teams using these workload principles.

## CAELIC GAMES PLAYER PATHWAY

## F3 / ADULT

<b>PATHWAY</b>	WHAT?	WHO?	HOW?
ATHLETIC DEVELOPMENT	Homebased Sessions/Warm Ups/Athletic Development Sessions focusing on Movement, Speed, Strength & Power.  MC & Integrated Conditioning, Planning and Periodisation.  Basic readiness and workload monitoring with clear follow-up process.  Nov-March: 2-3 integrated/AD units, 3 week on/1 week off. April-Sept: 1-2 integrated/AD units, 3 weeks on/1 week off.  Assessments - Standardised Fitness Tests & Player Profiles.	Club Coaches and (Club) Coach(es) with AD Coach Level 1 (Adult F3)/ Sports Science Related Qualification.	Coach Development - AD Coach Level 1 (Adult F3).     Additional online/face to face resources and education.
NUTRITION	Awareness and knowledge of link of food and fluid to health and performance, specific to male and female players.	Coaches/In Club Expertise through Workshops.	Coach Development, Practitioner Databases.
SPORT PSYCHOLOGY	Wellbeing coping skills.     Continuing development of 5Cs, plus mental skills training such as goal setting, routines, relaxation, reflection.	Coaches/In Club Expertise.	Coach Development.
PERFORMANCE ANALYSIS	Support the development of a reflective player who can apply constructive feedback to enhance their technical abilities and games sense, delivery of agreed team analysis.	Coach/In Club Expertise through coach-practitioner meetings.	Coach Development.
PHYSIOTHERAPY & REHABILITATION	Warm ups, movement and injury screening.     Load management.     Access to physio/rehab specialist support.     Injury prevention and education workshops.     Injury recording.	CORU / ISCP / HCPC / ARTI* Accreditation + 2 Years MSK* Experience.     Level 8 Degree.	Gaelic Games Accrediation for Practitioners.     Database of Accredited Practitoners.
SKILL ACQUISITION	<ul> <li>Develop awareness of the complementarity of play and practice, and of Gaelic Games and other sport participation, for skill development.</li> <li>For players, development of effective practice techniques in the context of individual and group training.</li> <li>For coaches, individual review of design (e.g. selection and sequencing of practice activities), delivery (e.g. instruction and feedback), and evaluation (e.g. testing procedures) covering generic topics.</li> </ul>	Coach/In Club Expertise through coach-practitioner meetings.	Coach Development.

<sup>\*</sup>MSK = musculoskeletal

## ATHLETIC DEVELOPMENT Workload Principles:

- Be aware of the players total workload, across all sessions. This could include what the player is doing with the club/ school/county and any other sports/ activities and organisations they may be involved with.
- Provide guidance and support to players who are over trained and under trained.
- Be aware of spikes in the players workloads. This can increase their risk of injury.
- Taper the players workload in the lead into important games as this may help optimise performance.
- 5. Avoid\*:
  - Completing two high intensity activities in the one day.
  - · Playing two full games within 60 hours.
  - Completing high intensity activities on two consecutive days.
- Encourage windows and opportunities for unstructured free play activities during the players week.
- 7. Encourage a minimum of one day off from structured activity per week.
- Help players to understand these workload principles and encourage them to communicate with the coach.
- Encourage involvement in a variety of activities/sports. As the player gets older, the number of activities will decrease. Coaches should work together to manage activity across different sports/ teams using these workload principles.

<sup>\*</sup>CORU/ISCP/HCPC/ARTI = accrediting bodies for physio/rehab specialists

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PAIN WAY	WHAT?	WHO?	HOW?	
ATHLETIC DEVELOPMENT	Pre Season/Competitive Season: up to 4 sessions per week (1 to 3 AD or Integrated AD Sessions) Regional sessions where appropriate. Two days off per week including individual recovery sessions. Planned regeneration weeks. Quality Readiness and Workload Monitoring (Online system plus workload monitoring plus GPS) with clear follow-up process. Assessments - Standardised Fitness Tests and Player Profiles.	AD Coach Level 3/Masters Qual and Practical Accreditation with County AD/Performance Lead (AD Level 3) and IDT.	Coach Development - AD Coach Level 3. Additional online/face to face resources and education.	3.
NUTRITION	Bespoke training and game day, injury related nutrition and hydration practices, body compostion targets, supplement use and anti-doping.	Nutritionist in IDT (MSc in Nutrition, accred practitioner SENR/AfN/INDI, >2 years experience) 1:1 with players, group support and food provision.	Stakeholder Support, IDT Support, Practitioner Database.	5.
SPORT PSYCHOLOGY	Awareness, recognition and signposting of mental health issues. Community leadership. Individual and team values identification, resilience, psychological safety/culture, self-awareness & self-management, wellbeing monitoring, mental health support, retirement support, athletic identity.	Team Medics, GPA, Coaches, Managers. Sport Psychologists (in IDT) (MSc in Sport Psych, accred, 5 years experience) in IDT through Team & 1:1 Psychology Support. GPA supports.	Coach/Manager Development, Stakeholder Support,IDT Support, Practitioner Database.	
PERFORMANCE ANALYSIS	The delivery of agreed team and individual analysis in a way that facilitates enhanced player and team analysis, reflection and decision making.	Coach & player led supported by the Performance Analyst, accredited to Level 3/4, with IDT through coach-practitioner meetings.	Stakeholder Support, IDT Support, Practitioner Database.	6
PHYSIOTHERAPY & REHABILITATION	On Site delivery of physio/rehab with IDT.  Movement and Injury Screening.  Injury Prevention and Education Workshops.  Injury surveillance.	CORU/ISCP/HCPC/ARTI Accreditation+ 2 yrs Exp in MSK, Level 8 degree.	Gaelic Games Accrediation System for Practitioners. Database of Accredited Practitoners Gaelic Games Injury Surveillance System. Stakeholder Support, IDT Support.	7.
SKILL ACQUISITION	<ul> <li>For players, development of targeted individualised aspects of preparation and performance (e.g., addressing technical 'bad habits') and developing sophisticated group tactical concepts.</li> <li>For coaches, identifying opportunities for innovation in practice session design by exploiting the latest research and technology for learning.</li> </ul>	Support primarily delivered by coaches, potentially supported by Skill Acquisition Specialist (in IDT).	Long-term Stakeholder Support, IDT Support, Practitioner Database, Coach Development.	9.

## ATHLETIC DEVELOPMENT Workload Principles:

- Be aware of the players total workload, across all sessions. This could include what the player is doing with the club/ school/county and any other sports/ activities and organisations they may be involved with.
- 2. Provide guidance and support to players who are over trained and under trained.
- Be aware of spikes in the players workloads. This can increase their risk of injury.
- Taper the players workload in the lead into important games as this may help optimise performance.
- 5. Avoid\*:
  - Completing two high intensity activities in the one day.
  - · Playing two full games within 60 hours.
  - Completing high intensity activities on two consecutive days.
- Encourage windows and opportunities for unstructured free play activities during the players week.
- 7. Encourage a minimum of one day off from structured activity per week.
- 8. Help players to understand these workload principles and encourage them to communicate with the coach.
- Encourage involvement in a variety of activities/sports. As the player gets older, the number of activities will decrease. Coaches should work together to manage activity across different sports/ teams using these workload principles.