PGI PERFORMANCE REPORT

Athlete: John Doe
Evaluation Type: Performance Evaluation
Prepared By: PGI Lead Evaluator
Coach: —
Practice Volume: ~14 hours/week

Technologies Used:
Polhemus 3D • GBD 3D Motion • Smart2Move Force Plates • TrackMan IO • PGI Physical Screen

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1. PLAYER OVERVIEW

John Doe is a recreational competitive golfer with a high practice volume and a strong multi-sport athletic background. His stated goals are to improve long-game performance, increase total carry distance, and enhance sequencing efficiency and energy transfer.

John's current scoring strengths lie in **short-game control and putting**, providing a reliable foundation. His primary performance gaps remain **driver and mid-iron distance and dispersion**, which align directly with the biomechanical, ground-force, and physical findings in this evaluation.

John prefers a **high-draw ball flight** and commonly misses with **snap hooks or pushes**, indicating face-control variability driven by sequencing and force-timing issues rather than path mechanics alone.

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2. INJURY HISTORY & PERFORMANCE CONTEXT

John presents with a significant cumulative injury history:

- Bilateral ankle sprains
- Bilateral knee hyperextension
- Bilateral hip arthritis
- Left wrist tendinitis
- Bilateral golfer's elbow
- Left shoulder impingement

Performance Impact
These limitations directly influence John's movement strategy. Reduced ankle and hip function limit posting and ground-force efficiency, while upper-extremity overuse contributes to **hand-dominant acceleration patterns** and early release timing. These compensations explain both the loss of distance and the volatility in start line.

3. PERSONALITY PROFILE (PEAK GOLF PERSONALITY INDEX)

Trait Scores

- **G (Grounded / Structured):** 30
- **O (Outgoing / Competitive):** 17
- **L (Listener / Adaptive):** 25
- **F (Fact-Based / Analytical):** 34

Interpretation

John is **F/G dominant**, indicating a strong preference for structured learning, objective feedback, and clear cause-and-effect relationships. Progress is maximized when training is logical, measured, and benchmarked rather than exploratory or feel-based.

Coaching Implications

- Clear priorities with limited variables
- Data-driven validation of changes
- Emphasis on efficiency over effort
- Structured progressions with checkpoints

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4. 3D BIOMECHANICAL EVALUATION

4.1 Kinematic Sequence

Findings

- **Transition Initiation:** Pelvis
- **Transition Order:** Pelvis → Club → Arm → Torso
- **Peak Speed Order:** Club → Pelvis / Torso / Arm (tied)

Segment Peak Speeds

- **Pelvis:** 306°/s (below PEAK norm of 480–600°/s)
- **Torso:** 475°/s (moderate, late)
- **Arm:** 933°/s (high, poorly sequenced)
- **Club:** 1471°/s (acceptable, hand-driven)

Segmental Gain Efficiency

- **Torso–Pelvis:** +55% (adequate but late)
- **Arm–Torso:** +96% (excessive; delayed transfer)

- **Club–Arm:** +58% (below optimal; premature release)

Interpretation

John initiates correctly from the ground, but **upper-segment acceleration occurs too early**, eliminating kinematic stretch. Energy is released simultaneously rather than transferred progressively, producing an arm-dominant delivery and reduced speed efficiency.

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5. 6 DOF (MOTION) ANALYSIS

Posture

- Pelvic Bend (Address): **27.1°** → Excessive anterior tilt (S-posture)
- Torso Bend (Address): **23.5°** → Shallow hinge

Sway & Thrust

- Pelvic Sway @ Top: **+10.2 cm** (excessive trail shift)
- Pelvic Thrust @ Impact: **+7.8 cm** (early extension)
- Pelvic Bend @ Impact: **14°** (>10° loss from address)

Rotation

- Pelvic Rotation (TOB): **−54.4°** (within range, delayed)
- Torso Rotation (TOB): **−73.5°** (solid coil)
- X-Factor Stretch: **0°** (absent)

Interpretation

S-posture, excessive lateral loading, and early extension limit pelvic acceleration and braking mechanics. The absence of X-factor stretch confirms **no elastic energy storage** during transition.

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6. GROUND REACTION FORCE (GRF) ANALYSIS

Measured Pressures

- **P1:** 55% lead / 45% trail (balanced)
- **P2:** 58% trail (acceptable, below optimal)
- **P4:** 83% trail (strong load)
- **P5:** 55–56% lead (unstable re-centering; toe-biased)

Interpretation

John loads the trail side effectively but struggles to **re-center early and stabilize on the lead side**, reducing vertical force contribution and forcing compensation through the arms and hands.

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7. PGI PHYSICAL SCREEN SUMMARY

Mobility

- Restricted bilateral hip internal rotation (arthritic change)
- Limited ankle mobility
- Limited shoulder external rotation

Stability

- Weak dynamic core control
- Poor pelvic tilt awareness
- Inconsistent single-leg balance

Power

- Vertical Jump: **11.1"**
- Grip Strength: **39.3 kg (L) / 38.2 kg (R)**
- Driver Club Speed: **78 mph**

Interpretation

Physical limitations restrict posting, braking, and rotational efficiency. Power output and club speed are well below coordination and practice potential.

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8. PERFORMANCE INTERPRETATION

Driving

Distance loss and dispersion are driven by:

- Collapsed sequencing
- Late lead-side stabilization
- Hand-dominant acceleration
- Early extension under speed

Ball Flight

- **Snap hook:** Early release and face closure
- **Push:** Stalled release with unstable base

These misses are **sequencing- and force-timing driven**, not grip or path errors.

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9. DEVELOPMENT PRIORITIES (F/G ADJUSTED)

Priority 1 — Sequencing & Stretch
Restore delay between pelvis, torso, and arms.

Priority 2 — Posture & Pelvic Control
Eliminate S-posture and early extension.

Priority 3 — Lead-Side Stability
Earlier re-centering and posting through P5–P6.

Priority 4 — Power Development
Improve vertical and rotational force safely.

Priority 5 — Performance Validation
Confirm gains under pressure via carry and dispersion metrics.

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10. SUMMARY STATEMENT

John Doe is a disciplined, analytical golfer whose long-game limitations are rooted in **efficiency, sequencing, and force timing**, not effort or intent. His athletic background and practice volume provide a strong foundation for improvement.

By restoring kinematic stretch, improving posture and lead-side stability, and rebuilding ground-force utilization, John is positioned to achieve meaningful gains in distance, dispersion, and long-term durability without increasing injury risk.