Datasets Background Information

Looking for:

-variables to predict an athlete's hamstring risk category (routine, low-high),that are the best

-how strong of a correlation btw an athlete in a high-risk category and HSI incidence

-variables to predict subsequent HSI injury risk that are the best

ACWR(Acute Chroinc Workload Ratios)- Catapult: ALL VARIABLES RELEVANT

- anon_id (merge data on)
- Date (lots of different forms available)
- Age
- Position (useful predictor?)
- Total.Player.Load (useful predictor?)
- Acute.Total.Acceleration.Load.EWMA (exponentially weighted moving average)
- Acceleration.Load.ACWR
- Player.Load.ACWR
- Total.Distance.ACWR

Catapult Session- Outdoor

- Primary.Position (see how it compares to position)
- Activity (interesing to look at maybe)
- Position (on ACWR dataset aswell)
- TRIMP (training impulse), training duration by training intensity

Incident Report

- Incident.Type (sort only to injury)
- Side (of injury) - left, right, bilateral
- Coach.s.Diagnosis (injury type + side of injury)
- OSIC (explanations on shared excel sheet)
    - Hamstring:
        - TM1 (hamstring strain), TMB (biceps femoris strain grade 1-2), TMS (semimembranosis/tendinosis sprain grade 1-2)
        - TMH (hamstring cramping), TMY (hamstring trigger points), TR1 (hamstring tendon injury)
    - Quads:
        - TMR (rectus femoris strain), THQ (haematoma), TMCQ (quad cramping), TMT (trigger points)
    - Adductors:
        - TMAL (adductor longus strain), TMM (adductor magnus strain)
    - Glutes:
        - TMG (gluteus medius/minimus strain)

- ○ Thigh (unspecified muscle group):
  - ■ THT (thigh haematoma), THX (other bruising), TIX (thigh abrasion), TMC (thigh cramping), TML (back muscle tightness), TMZ (thigh muscle strain/spasms/trigger points)
- Final.Diagnosis
- Result.of.Sport.Participation (sort out not sport related)
- Sport Identifies. (sort only football)
- Recurrence.of.Injury
- Injury.Prognosis
- Injured.Position
- Time.Frame.of.Injury.Event - look at potential influence of fatigue
- Type.of.Event
- Surface. - potentially interesting to look at if the injuries occurred on grass or turf

Performance Normative
- Nordic.Average
- Nordic.Imbalance..
- Abduction.Abduction.Ratio
- Eccentric.Peak.Power….Relative
- Modified.RSI

-lots of same metrics for NFL aswell (comparison doesnt help us I dont think in what we are trying to measure/determine)

Performance Risk Assessment
- Position
- Index.Today
- L..Hamstring.Max.Force (L and R)
- L..Hamstring.Max.Force….Year (L and R)
- Hamstring.Avg..Imbalance
- Hamstring.Avg..Imbalance….Year
- L..Eccentric.Mean.Force ((L and R, and w/ year like above)
- Concentric.Mean.Force.Asym (and w/ year)
- CMJ.Landing.Asym (countermovement jump)
- CMJ.Jump.Height (intuition says less important than landing asym.)
- Relative.Peak.Power
- CMJ.Peak.Force
- IMTP.Peak.Force,

Soft Tissue Risk Status
- anon_id (merge)
- Status (routine, low-high)

Strength Testing Data
- Left.Quad.Force

- Right.Quad.Force
- Left.Hamstring.Force.Nordic
- Right.Hamstring.Force.Nordic
- Left.Hamstring.Quad.Ratio
- Right.Hamstring.Quad.Ratio
- Left.Hamstring.Quad.Percentage
- Right.Hamstring.Quad.Precentange

VALD- Performance Test
- Session.Date
- Trend
- Maximum.Force
- Average.Force
- Nordic.Left.MAX
- Nordic.Right.MAX
- Percent.Difference.Norm
- Nordic.Maximum.Bilateral.Force
- Nordic.MEAN.Imbalance
  - Nordic.MEAN.Imbalance.with.side has negative values to describe side
- Nordic.Imbalance.Flag
- Contains hip adductor information if needed in future

VALD Normative Data Report
- Nordic Force(N) -normal distribution

25th: 394, 50th: 452, 75th: 510
- Nordic Imbalance(%)

25th: 3.1, 50th: 6.7, 75th: 11.7
- Eccentric Peak Power-Relative
- RSI(reactive strength index) -Modified
- FT:CT (flight time:contact time) Ratio
- Eccentric Deceleration Impulse
- Eccentric Duration

Wellness Report
- Sport (sort out blank/not football)
- How.are.you.doing.mentally. (0-5)

0-far worse than normal

5-far better than normal
- How.are.you.feeling.physically. (0-5), same as previous
- How.did.you.sleep.last.night. (0-5)
- Sore.Areas and/or How.sore.are.you. (0-5)

PERFNORM BY POSITION
- Nordic.Average

- Nordiuc.Imbalance
- Adduction.Force
- Abduction.Force
- Adduction.Imbalance
- Abduction/Imblance
- Adduction.Abduction.Ratio
- Jump.Height
- Modified.RSI
- Eccentric.Peak.Power.Relative
- Concentric.Peak.Power.Relative
- Wellness.Compliance (0-20)