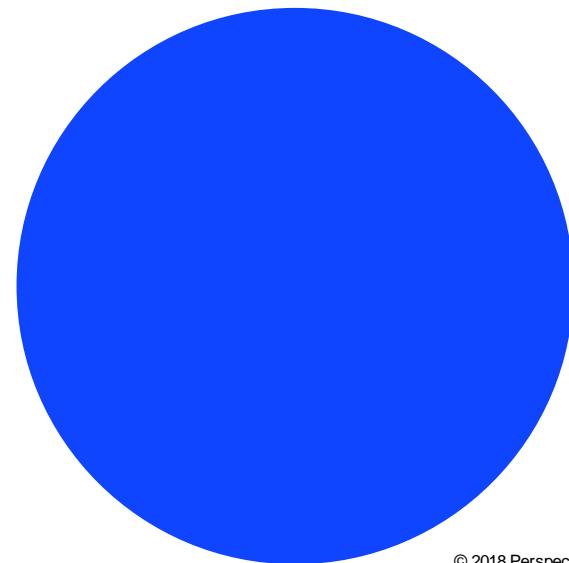




SLAM+ prototype **MTEC Warfighter Brain Health**

LIMBIC - Military and Tactical Athlete Research Study

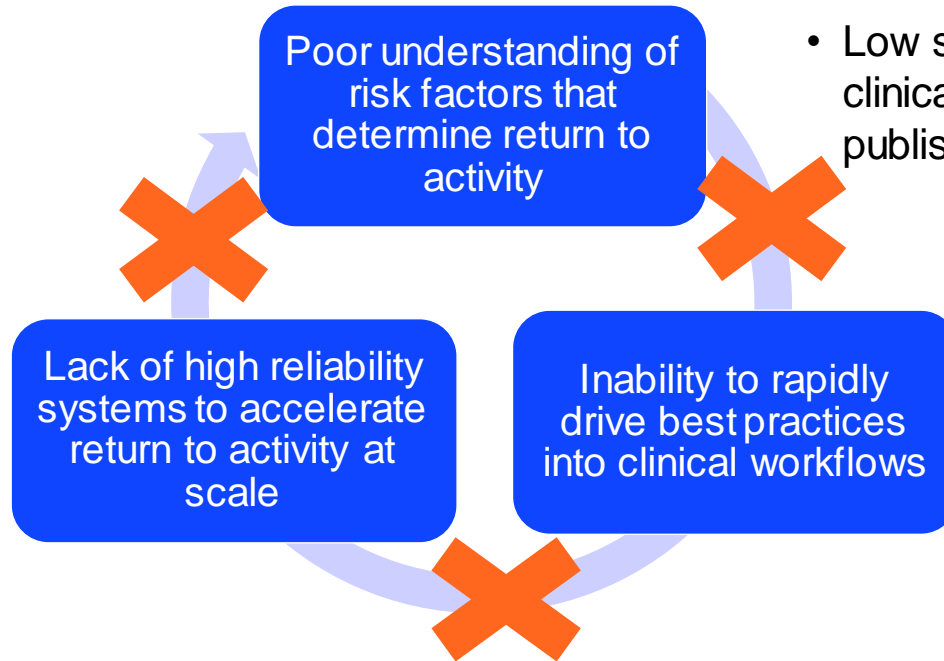
Employing Evidence-Based Technology to Drive Return to Activity



Problem with mTBI care

The current pipelines to support return to activity are low-reliability systems.

- Evidence-based tools (CPGs) not automated into clinical care.



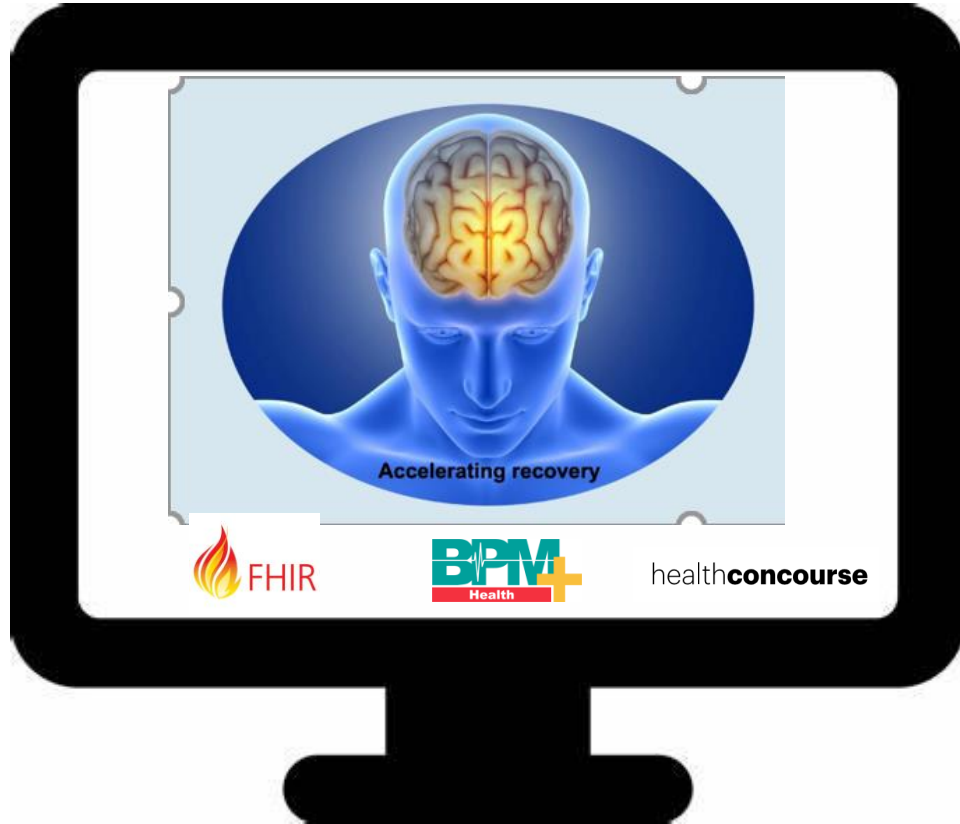
- Low standardization and clinical relevance of most published research

- Disconnect between knowledge and practical clinical tools.
- Gap from research discovery to clinical implementation

User-friendly Tools are needed to (a) identify individuals at risk for prolonged mTBI-related symptomology, (b) make evidence-based recommendations to facilitate recovery, and (c) guide the overall process through return to activity and beyond.

SLAM+ Workflow Training Prototype

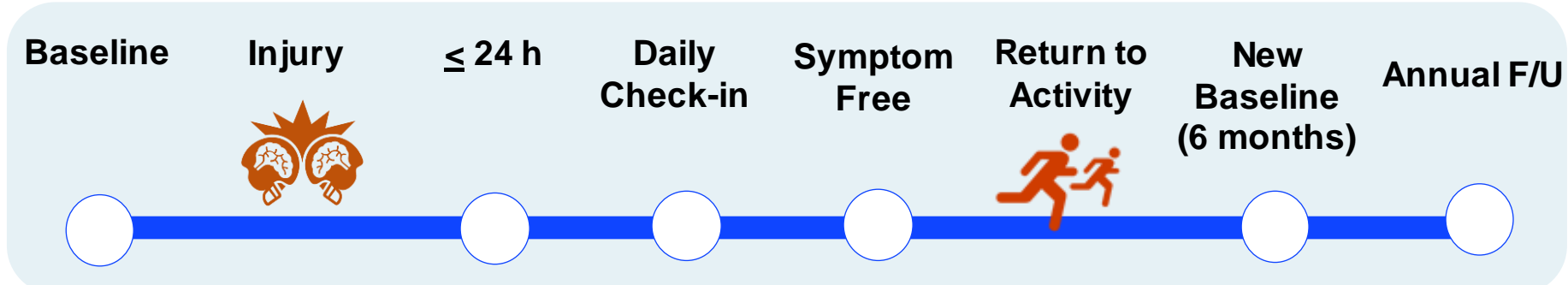
Enabling the learning health system with Open Standards, Open-Source process automation



SLAM+ LIMBIC MATARS training demo

- Choose an individual with acute mTBI from the High, Medium or Low risk cohort.
- Collect and use individual data to guide them towards the most rapid recovery.
- Media rich, highly configurable process-based CPG training workflows.
- Deploy CPGs as code into Defense Health Agency and Veterans Health Agency clinical workflows. (Future)

Intelligent automation: Sports as a Laboratory Assessment Model (SLAM)



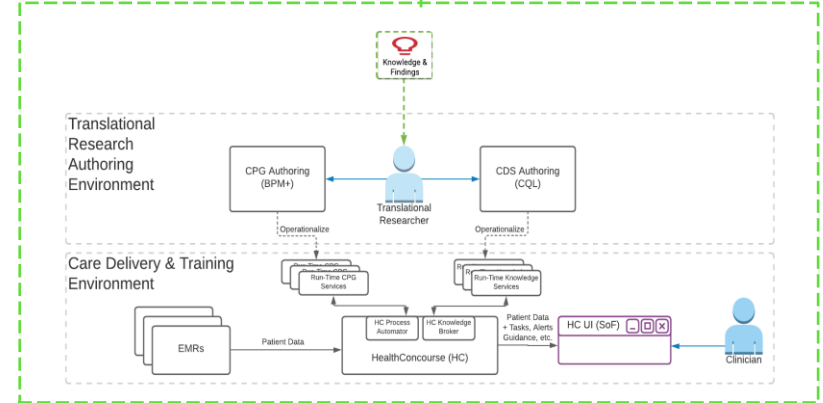
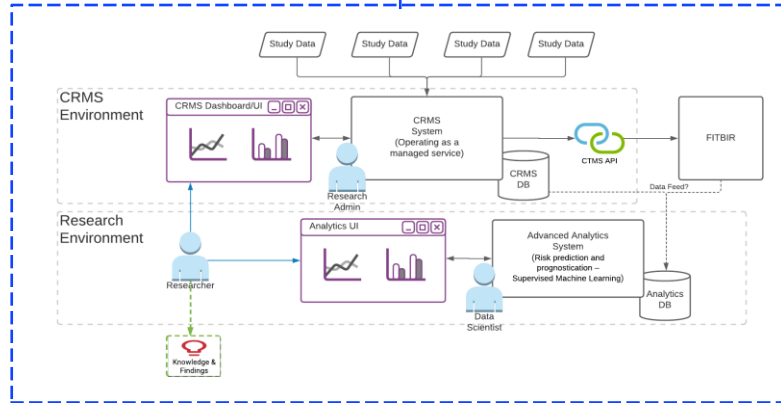
- ***SLAM is a gold-standard approach to evaluating athletes before, at the time of and throughout recovery from mTBI.***
- ***LIMBIC-MATARS will deploy SLAM to deliver a uniform, gold-standard assessment to 15,000+ student athletes and ROTC cadets***
- ***The LIMBIC-MATARS NCAA partners are in alignment with SLAM, which allows for easy implementation of the enhanced, standardized, evidence-based protocol.***

Solution to mTBI Care in 4 Steps

Extracting and operationalizing best practices from our prospective research study

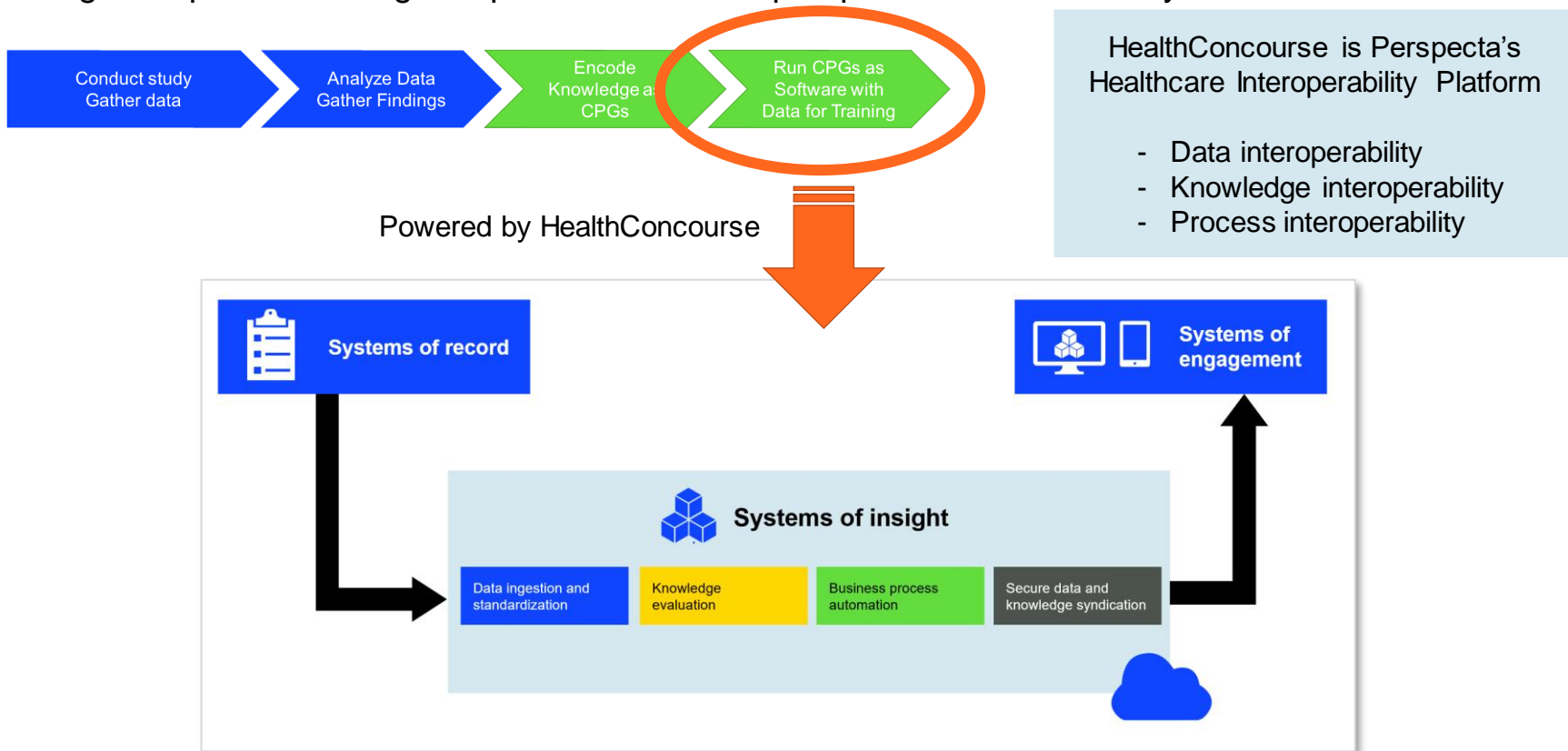
Steps 1 and 2: From Data to Knowledge

Steps 3 and 4: From Knowledge to Outcomes

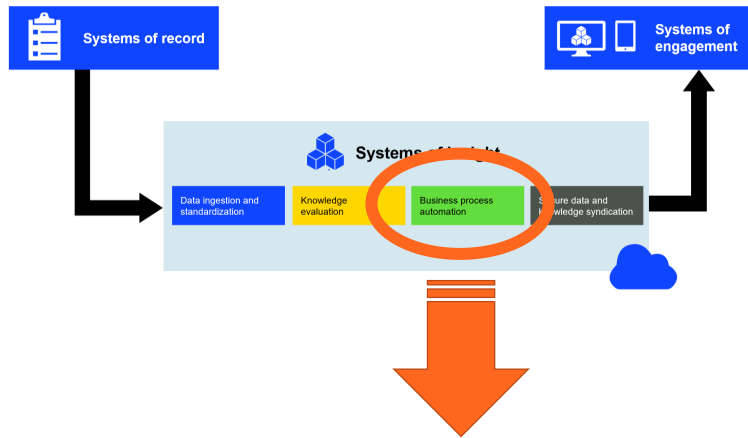


Step 4 – Automating CPGs – Powered by HealthConcourse

Extracting and operationalizing best practices from our prospective research study

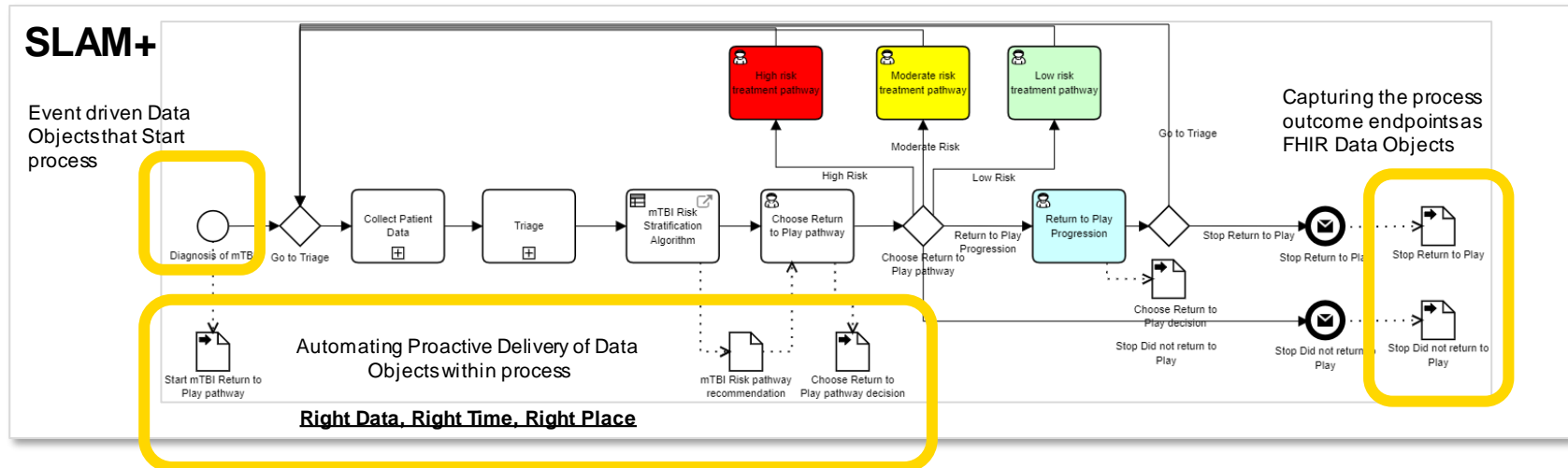


HealthConcourse CPG operationalization: data object binding



Data objects needed as input or output from modeled activities

Bound to FHIR endpoints from HealthConcourse with patient data sourced from multiple EMRs/SORs



Care without Boundaries



 **perspecta**

health**concourse**

Propose near real time SLAM+ dashboards

TEAMS

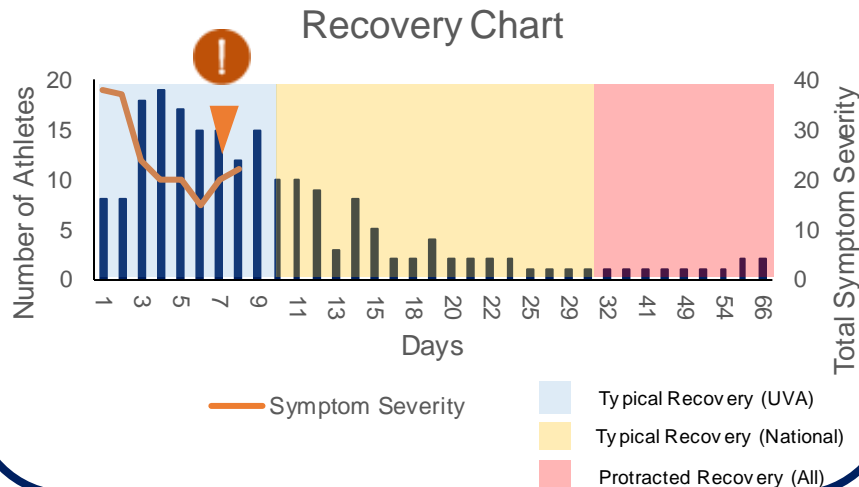
REPORTS

TRENDS

FORMS



Name: Carol Davis
 Birthdate: 11/1/2002
 Age: 18
 Height: 5'10"
 Weight: 151 lbs
 Year: 2nd year
 Position: PG
 Prior Concussions: 3



Measure	Progress
Tandem Gait	⚠️
NIH Toolbox	✓
HIS-r	✓
ImPACT	✓



READINESS	SLEEP (hr)
64	5.5

Symptom

Severity

Duration

Potential Actions

Neck Pain	6	4	Recommendations
Nervousness	4	4	Recommendations
Tingling	6	3	Recommendations
Drowsiness	4	5	Recommendations

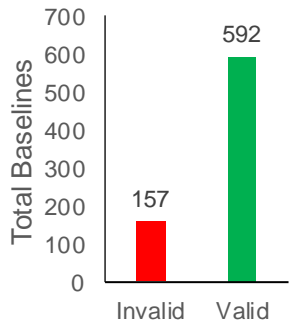


Proposed Concussion Dashboard

TEAMS



Baselines Complete
749/749



REPORTS



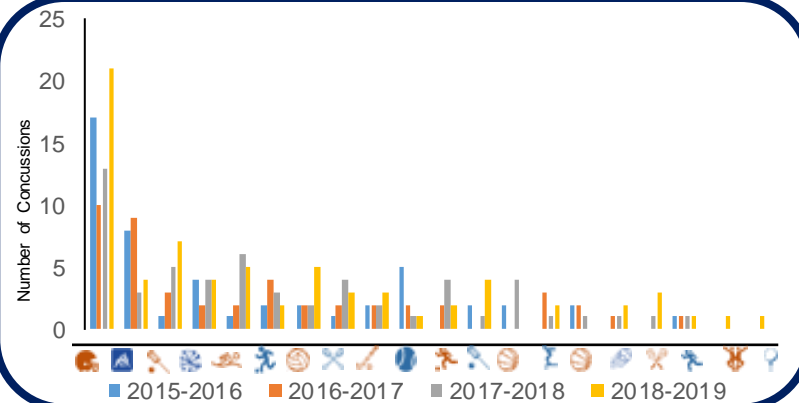
Total Concussions
73 



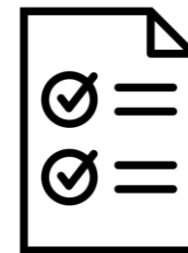
TRENDS



Recovery
7.8 ± 5.01 Days



FORMS



Our Protocol

LIMBIC MATARS's tools will (a) identify individuals at risk for prolonged mTBI-related symptomology, (b) make evidence-based recommendations to facilitate recovery, and (c) guide the overall process