

CONCUSSION MANAGEMENT PROGRAMME

Empowering Young Athletes, Protecting Futures



THE BENEFITS FOR SCHOOLS

Improving Student Safety & School Accountability for Concussion Managament



1. ENHANCING STUDENT SAFETY & SCHOOL ACCOUNTABILITY

We are proposing a comprehensive concussion management Programme designed to **elevate the standard of care for students** participating in sports and ensure the safety and well-being of young athletes.

Concussions can be a serious issue in schools, and without a structured approach, students may not receive the care they need, putting their long-term health at risk.

START WITH A STRUCTURED SAFETY PROTOCOL

Concussions are often misunderstood or mismanaged, leading to inconsistent care across schools. Many doctors and healthcare providers are not specifically trained in concussion treatment, meaning that some students may be sent back to play too early or not receive the right diagnosis at all.

Our Programme introduces a standard operating procedure (SOP) that ensures every suspected concussion is handled appropriately, following evidence-based guidelines. This means that students who experience a concussion are referred to the correct healthcare providers who specialise in concussion management.







THE BENEFITS OF A STRUCTURED SAFETY PROTOCOL

By implementing this SOP, schools will ensure that:

- + No student is left untreated or misdiagnosed.
- ♣ A thorough process is in place for concussion identification and treatment, reducing confusion among staff and parents.
- ♣ Return-to-play decisions are made based on medical expertise, protecting the child from long-term risks associated with improper recovery.

The result?

Safer outcomes for students and peace of mind for schools, knowing they are doing everything they can to protect young athletes.

2. IMPROVING THE ACCURACY OF CONCUSSION DIAGNOSES WITH BASELINE TESTING

Accurate diagnosis is critical when it comes to concussions. One of the key features of our Programme is the implementation of neuro-cognitive baseline testing.

This involves assessing students' cognitive function at the beginning of the school year to establish a baseline.

In the event of a suspected concussion, their cognitive abilities can be reassessed and compared against this baseline, making it easier to identify changes caused by the concussion.

This is especially important for students with unique cognitive profiles, such as those with ADHD, dyslexia, or anxiety disorders. These students may not have the same cognitive baselines as their peers, and without individualised data, diagnosing a concussion could be less accurate.

By conducting annual baseline tests, schools can **ensure** a more precise assessment and minimise the risk of over or under-diagnosis.





THE BENEFITS OF ANNUAL BASELINE TESTING

Reducing false positives:

Students will not be unnecessarily removed from sports or school if they are not actually concussed, avoiding unnecessary absenteeism.

Ensuring full recovery before returning to play:

For students who are concussed, baseline data ensures that they only return to sports when they have fully recovered, preventing long-term damage.

Minimising long-term injuries:

Research shows that returning to play too soon after a concussion increases the risk of a second concussion by four times. Additionally, students who return too early have 2.5 to 3.4 times higher odds of suffering a lower extremity injury. This Programme will reduce these risks by ensuring students only return when it's safe.

In short, this data-driven approach leads to fewer mistakes in diagnosing concussions and fewer injuries for students, all while improving their ability to return to the classroom and sports in a timely, safe manner.

Evaluating a child's academic readiness post concussion:

It offers an objective measure to determine if a child is neurocognitively prepared for clinical or academic examinations.

For instance, if a concussion occurs before tests or exams, baseline data enables the school to assess whether the child is fit to participate in these assessments.

In cases of significant examination periods, a neuropsychologist can provide a clinical report detailing the child's neurocognitive status. This report helps schools decide whether accommodations or adjustments are necessary, ensuring the child's well-being and academic integrity are prioritised.





3. PREVENTING CUMULATIVE BRAIN DAMAGE AND LEGAL RISKS

One of the most critical reasons for early and accurate concussion management is preventing **cumulative brain damage**. Repeated concussions, especially when not properly managed, can possibly result in serious long-term conditions such as **Chronic Traumatic Encephalopathy (CTE)** and **Second-Impact Syndrome**.

These conditions can cause irreversible damage to a student's brain, affecting their cognitive abilities and overall quality of life. Protecting students from this requires careful management of concussions and avoiding premature return to sports.

Beyond student safety, **schools also face increasing legal risks**. In the U.S., there are several high-profile lawsuits where schools and organisations are being sued for **failing to appropriately manage concussions**.

Schools that do not have proper concussion protocols in place are **leaving themselves vulnerable to litigation** from parents and guardians. By adopting a Programme that follows best practices for concussion management, schools can demonstrate their commitment to student safety and protect themselves from legal consequences.



SHARKS MEDICAL

4. AVOIDING THE WASTE OF RESOURCES ON UNNECESSARY PROCEDURES

Concussion management in schools can often lead to wasted resources, both in terms of time and finances. Many children are subjected to unnecessary diagnostic scans, such as CTs and MRIs, which do not help in diagnosing concussions and expose them to unnecessary radiation. Likewise, some parents may invest in technology like electronic gum guards or mobile apps in the hopes of monitoring concussions—yet none of these tools are currently approved to accurately diagnose concussions.

By focusing on **evidence-based** protocols and reducing the use of unnecessary tests and scans, this Programme helps to:

- Conserve medical resources, ensuring that students are only referred for imaging or specialist consultations when absolutely necessary.
- Avoid unnecessary radiation exposure for children, protecting their long-term health.
- Eliminate the use of ineffective diagnostic tools that provide no added value in managing concussions.

Through this Programme, schools can manage concussions efficiently without burdening families or the healthcare system with unneeded tests and procedures.



OUR SOLUTION

Empowering Young Athletes, Protecting Futures





PARTNERING WITH THE INDUSTRY STANDARD PLATFORMS

We have developed partnerships with the industries best platforms to bring your the latest in concussion diagnosis and management.



THIS ENABLES US TO OBJECTIVELY MEASURE CRITICAL HEALTH METRICS FOR STUDENTS



Balance



Cognition



Function

This Sway test includes the following domains: Attention span and working memory - visual and verbal | Sustained and selective attention time | Response variability and non-verbal problem solving | Cognitive ability | Neurocognitive Index | Psychomotor Speed | Executive Functioning | Cognitive Flexibility | Balance | Reaction Time: simple reaction time, choice reaction time reaction, and shifting attention.

HOWIT WORKS

Individualised Student Testing at scale



WHAT IS INCLUDED

The Sharks Medical Center Concussion Programme is a complete concussion management system that offers a 12 month management Programme tailored to the needs of individual students and the entire school.

*Sway Medical App is the industry standard for testing, monitoring and evaluating players before, during and after games, providing over 40+ Objective tests and insights.

12 Months of Cover Includes:

CONCUSSION MANAGEMENT PLAN

- Baseline Assessments
 One baseline cognitive test conducted at the start of the year using the Sway medical app.
- Concussion Assessment Access Access to the Sway app for any concussion assessments throughout the year following a head injury.
- Doctor's Concussion Consultations Consultation with a specially trained doctor at Sharks Medical for concussion diagnosis, using the SCOAT-6 tool and the Sway app.

⊘ Return to Play Assessment

A follow-up doctor consultation after recovery to assess readiness to return to sports, including repeat Sway and SCOAT-6 tests.

Neuropsychologist Review

A neuropsychologist review and report based on the results of the Sway medical app tests and doctor assessments, to ensure thorough evaluation.

R650 Per Student, Annually





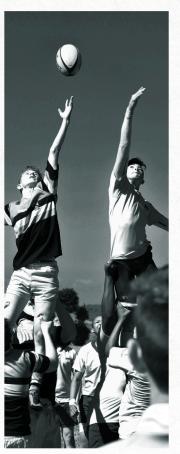
GIVING BACK WITH PROJECT 5:1

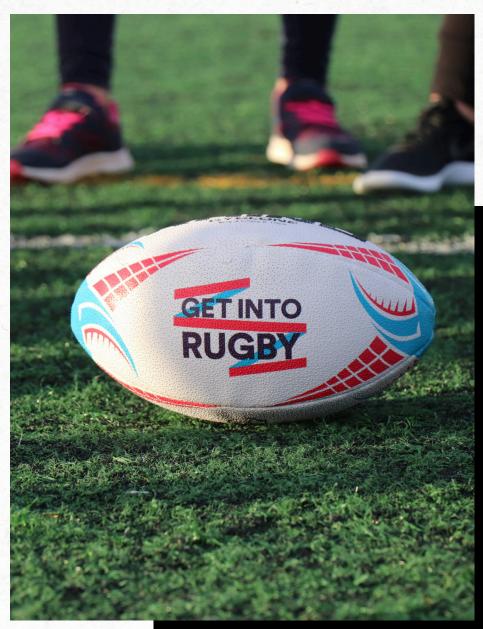
For every 5 paid students from your school that enrol in the programme, we will sponsor access for 1 student to the Programme. The chosen student will be at your discretion - This has been created to assist the bursary students.











IMPLEMENTATION OF THE PROGRAMME

A streamlined process to ensure compliance and improve safety protocols



1. PROGRAMME INTRODUCTION

Once the school agrees to implement the concussion Programme, the school will notify parents that they now have access to the Sharks Medical Concussion Programme. This step ensures that parents are aware of the program's benefits and the steps involved.

Depending on the school, this may be a compulsary programme or an opt in voluntary process. Allowing parents to decide whether they want their child to participate. Information will be provided on how parents can contact us directly to enrol their children, and the school administration will also be briefed on how the Programme operates.

2. PARENT OPT-IN AND MEETING WITH COACHES

After parents express interest, we will hold a meeting with the school's coaches and senior staff.

This meeting is designed to answer any questions and ensure everyone is aligned on the official procedures for managing concussions within the school environment.

The focus is on working collaboratively with sports facilitators to make sure they are comfortable with the process. Coaches will learn about best practices and how this Programme complements existing sports safety guidelines.



3. PAYMENT & ENROLMENT

Parents who decide to opt-in will complete their payment (R649.00 for the entire year - equivalent to a single GP doctor consult).

Once the payment is made, their child is officially enrolled in the Programme. This fee covers the baseline neurocognitive testing, concussion assessment through the Sway app, doctor consultations, and neuropsychologist evaluations.

The student is then added to our database for the year and will benefit from all the concussion management services provided by the Programme.

4. BASELINE TESTING

At the start of the academic year, we will conduct baseline neurocognitive testing at the school.

These tests provide crucial data for assessing the student's cognitive function in case of a head injury later in the year.

The testing will be done in groups of 20 to 30 students in a designated space, such as a classroom.

Each test takes about 15 minutes per student. The baseline is essential because it gives us a standard to compare against if the student experiences a head injury, allowing for more accurate and personalised concussion diagnosis later.





5. INCIDENT MANAGEMENT

If a student sustains a head injury during a game or any school activity, the staff, referees, or parents who are concerned about a concussion will contact the Concussion Staff member (eg. school nurse), who, in turn will contact us.

This step triggers the process of evaluating the potential concussion. The student will be booked in for an initial assessment at Sharks Medical, and parents are guided through the next steps, which include scheduling a consultation with a specially trained doctor at Sharks Medical.

6. DOCTORS EVALUATION

On the Monday or Tuesday following the incident, the student will see a doctor who specialises in concussions.

During the visit, the doctor will perform a comprehensive examination, including the SCOAT-6 test, which is a diagnostic tool for concussions, and a repeat Sway test.

These evaluations, combined with the student's baseline test, help confirm the diagnosis of a concussion. If a concussion is confirmed, the doctor will provide guidance on the next steps, including appropriate recovery protocols.





7. REFERRAL FOR RECOVERY

If the student is diagnosed with a concussion, the doctor may refer them to a physiotherapist or biokineticist for further treatment, which is handled at the family's expense.

The goal here is to ensure that the student has the support they need for a full recovery. This phase of the Programme allows the student to heal properly, preventing them from returning to sports too soon, which could increase the risk of further injury.

8. FOLLOW UP AND RETURN TO PLAY

Once the student has recovered from the concussion, they will be reassessed by the doctor.

This follow-up includes another Sway test and a repeat of the SCOAT-6 assessment. The results are sent to a neuropsychologist, who will review the findings.

If all is clear and there are no further concerns, the neuropsychologist and doctor will determine that the student is fit to return to sports. At this point, the student will receive clearance to participate in their normal activities again.

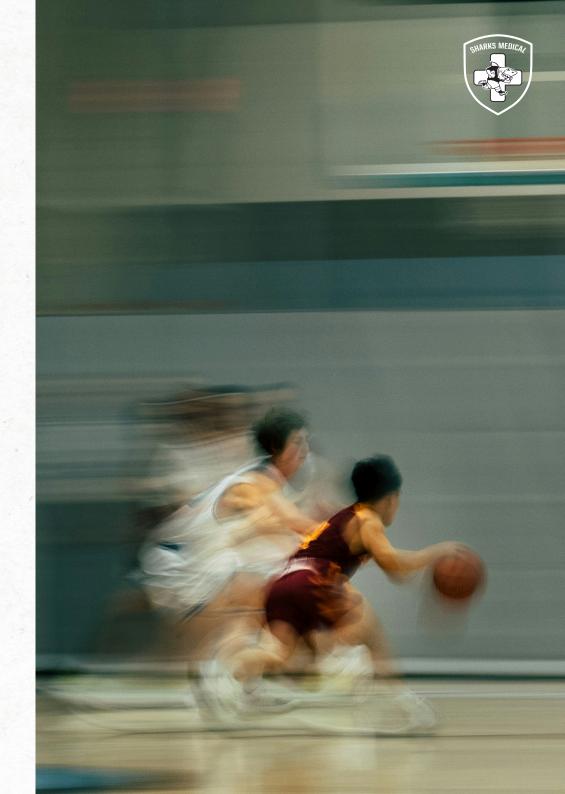


9. ANNUAL RENEWAL

At the end of the year, the Programme offers the option for parents to renew for the following year.

Baseline tests need to be updated annually to ensure that we have the most accurate and current data for each student.

This ensures the continued accuracy of concussion diagnoses and keeps the students protected under the program's services.









SEE YOU ON THE FIELD

The Sharks Medical Team



