Return To Think: Training Educators on Best Practices for Classroom Concussion Management

A Partnership between Alabama Department of Rehabilitation Services and the Alabama State Department of Education

July 12, 2018
Summer Professional Learning Conference

Presenters:
Maria Crowley, MA, CRC
State Head Injury Coordinator

Aimee Lott, LBSW
CRS TBI Care Coordinator
www.GetSchooledOnConcussions.com

Karen McAvoy, PsyD
Karen@GetSchooledOnConcussions.com

All rights reserved: © GetSchooledOnConcussions.com
But First...

What IS A Concussion, Anyway?
TRAUMATIC BRAIN INJURY

IS

✓ Injury from a blunt or penetrating object or injury from rapid movement that causes back and forth movement inside the skull
✓ Bruising of brain due to forward/backward movement against skull
✓ Twisting of nerve fibers due to twisting of brain within skull
✓ Broken or stretched nerve fibers = temporary or permanent challenges

IS NOT

Ø A new onset mental disorder
Ø Just emotional stress
Ø An acquired intellectual disability
Ø The effects of prolonged drug/alcohol abuse
Ø Gradual change in cognitive function
SKULL ANATOMY

Skull - rounded layer of bone; designed to protect from penetrating injuries.

Base – rough; bony protuberances.
Ridges - Result in injury to temporal & frontal lobes
Primary Injury
- Direct movement of the brain inside skull (slamming, rubbing, shearing)
- Penetrating object

Secondary Injury
- Bleeding over and within the brain tissue
- Swelling from fluid leakage
- (increased intracranial pressure)
- Fall subsequent to injury
Typical Neuronal Communication

Neuroplasticity
**Parietal Lobe**
- Sense of touch
- Differentiation: size, shape, color
- Spatial perception
- Visual perception

**Frontal Lobe**
- Initiation
- Problem solving
- Attention/Concentration
- Inhibition of behavior
- Planning/anticipation
- Self-monitoring
- Motor planning
- Personality/emotions
- Awareness of abilities/limitations
- Organization
- Judgment
- Mental flexibility
- Speaking (expressive language)

**Occipital Lobe**
- Vision

**Cerebellum**
- Balance
- Coordination
- Skilled motor activity

**Temporal Lobe**
- Memory
- Hearing
- Understanding language (receptive language)
- Organization and sequencing

**Brain Stem**
- Breathing
- Heart rate
- Arousal/consciousness
- Sleep/wake functions
- Attention/concentration
CAUSES OF TBI

- Motor vehicle crashes
- Blow to the head with any object
- Strenuous shaking of body
- Acceleration/Deceleration
- Falling and hitting head
- Body/equipment contact-sports
- Strangulation
- Being pushed against wall/solid objects
- Blasts
- Use of firearms
- Near drowning
WHERE IS TBI?

- Home – Falls, Assaults
- Car, Cycles, ATVs
- Schools
- Locker Room/Field/Track
- Treatment Centers-SA, MH
- Shelters-DV/IPV
- Work
- Military Service
<table>
<thead>
<tr>
<th>Severity</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Most common</td>
<td>Loss of consciousness from minutes to hours</td>
<td>Loss of consciousness for 6 or more hours</td>
</tr>
<tr>
<td></td>
<td>May or may not lose consciousness</td>
<td>May have shearing, bleeding or fractures in skull</td>
<td>Long-term challenges highly likely</td>
</tr>
<tr>
<td></td>
<td>Headaches</td>
<td>May not recall event</td>
<td>Behavior</td>
</tr>
<tr>
<td></td>
<td>Dizziness</td>
<td>Confusion</td>
<td>Social</td>
</tr>
<tr>
<td></td>
<td>Slowed processing</td>
<td>Impaired verbal memory</td>
<td>Cognition</td>
</tr>
<tr>
<td></td>
<td>Forgetfulness</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fatigue</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sensitivity to noise and lights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Altered sleep pattern</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RISK OF REPEAT BRAIN INJURIES

• After 1\textsuperscript{st} TBI, risk of second injury is 3 times greater

• After 2\textsuperscript{nd}, risk of third injury is 8 times greater

WHY?
CHANGES

Physical
• Headaches
• Changes in sleep patterns
• Fatigue
• Seizures
• Mobility/Balance
• Speech
• Hearing/Vision
• Taste/Smell

Behavioral
• Depression
• Anxiety
• Impulsivity/Risk Taking
• Social Inappropriateness
• Isolation/Inability to get along with others
• Irritability, Frustration
• Increased Self-Focus
• Before/After Contrasts
the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses through:

• Knowledge
• Attention
• Memory
• Judgment
• Reasoning/problem solving
• Decision making
• Comprehension
• Production/Processing of language
THINKING CHANGES

- Difficulty planning/setting goals
- Problems being organized
- Difficulty being flexible
- Difficulty problem solving
- Difficulty prioritizing
- Decreased awareness of thinking changes in self
Why Focus on Concussion and Schools?

**Long-term impact of concussion on education**

- Brain development and presentation of difficulties
- Parents/educators don’t recognize connection between challenges and concussion
- School may not know about injury/know how to accommodate
Rest, RTP and RTT

- Too little rest = prolonged recovery

- High levels of cognitive activity = longer recovery from concussion
  - Teens engaged in highest cog activity levels: 100 days to recover from symptoms
  - Teens w/limited cog activity: 20-50 days

- Too much rest = prolonged recovery, physical deconditioning, social isolation, mental health issues

- Athlete **must be** 100% symptom free for RTP

- Athlete ≠ 100% symptom free to RTT

Brown et al, 2014
Alabama Head Injury Task Force

Mission: to develop the ideal service delivery system for Alabamians who experience head injury.

- Alabama Department of Rehabilitation Services-Lead Agency
- Alabama Coalition Against Domestic Violence
- Mobile Infirmary Medical Center
- Alabama Head Injury Foundation
- UAB Injury Control Research Center
- Alabama Department of Senior Services
- Alabama Child Death Review Systems
- Alabama Council for Developmental Disabilities
- Spain Rehabilitation Center
- Auburn University at Montgomery
- Alabama Early Intervention System
- Alabama Medicaid Agency
- Department of Youth Services
- ADRS Children’s Rehabilitation Services
- ADRS Lakeshore Rehabilitation Center
- Alabama Department of Mental Health
- ADRS State of Alabama Independent Living Services
- Alabama Disabilities Advocacy Program
- Children’s of Alabama
- Alabama Department of Public Health
- Alabama Department of Education
- Alabama Department of Insurance
- UAB School of Public Health
- Pediatric Neuropsychologists
- Parents/Consumers

Committees:
- Behavioral Issues
- Children and Youth
- Prevention
- Consumer/Family
- Training and Education
- Sports Concussion
Sports Concussion Committee

Chair: Joe Ackerson, PhD

- Procuring grants and funds for taskforce activities
- Keeping our activities free from commercial endorsements
- Professional guidelines
- Resources
- Consultation
- Workshops
- Speaker’s bureau
- Developing and disseminating materials
- Includes public and professionals
- Legislation
- Agency relationships
- Systems change
- Agency relationships
- Process change

Public Policy

Education & Training

Clinical Resources

Funding

Research

Return to Think/Academic Reentry

Chair: Maria Crowley, MA

Chair: Drew Ferguson, ATC

Chair: Jimmy Robinson, MD

Chair: Michael Ellerbusch, MD

Chair: Jim Johnston, MD

Chair: Maria Crowley, MA
Alabama’s Project: ADRS and ALSDE

- Discussed the need
- Introduced an evidence-based practice: Karen McAvoy/REAP/GSOC
- Conducted train-the-trainer with TBI staff
- Conducted training with schools: self-identified regionally
  - Who needs training
  - Points of entry
  - Minimizing intervention and time missed
  - Comfort in addressing
- Gathered feedback: Pre-Test; Post-Test; Follow-up survey
Karen McAvoy, PsyD:

**School Psychologist**
- 2 Elementary Schools, 2 Middle Schools, 1 High School, 1 Charter School
- Coordinator of Mental Health, Brain Injury Team, Manifestation Determinations
- Brain Injury Specialist for Colorado Department of Education
- Co-Founder and Owner of GetSchooledOnConcussions.com

**Clinical Psychologist**
- Director, Center for Concussion, Rocky Mountain Hospital for Children, Denver, CO
- Director, Concussion and NeuroHealth Center, Berkana Rehabilitation Institute, Ft Collins, CO
- Author of REAP – Remove/Reduce*Educate*Adjust/Accommodate*Pace

All rights reserved: © GetSchooledOnConcussions.com
How every family, school and medical professional can create a Community-Based Concussion Management Program.

REAP™ The Benefits of Good Concussion Management

Center for Concussion

REAP™

Remove/Reduce
Educate
Adjust/Accommodate
Pace

Authored by Karen McAvoy, PsyD
The Training
Pre-Training Evaluation

What do you know about concussion and concussion management before we start this training?
Hands Up

- Who is in the room?
  - High school, middle school, elementary school

- Students with a concussion?
  - 1 week?
  - 2 weeks?
  - 3 weeks?
  - 4 weeks?
Alabama Sports Concussion Law (2011)

Advocated by Sports Concussion Committee within the Alabama Head Injury Task Force

Prevent, Identify and Treat concussions

Guidelines for returning to play

It applies to ALL athletic organizations statewide
Alabama Sports Concussion Law (Cont.)

1) Athlete removed from play when concussion suspected—minimum 24 hrs. Return to play once evaluated and cleared by licensed physician.

2) All Coaches: Sports-related concussions training annually.

3) Information provided to athlete and parent/guardian regarding concussions and current guidelines annually.
Who are the greatest champions for concussion?

**Athletics**

About 40+% of the concussions are from non-sports related activities.

Less than 40% of schools have athletic trainers.

Middle and elementary schools rarely have an athletic trainer.

Not all student-athletes will return to sport but 100% of student-athletes will return to learn.

**Medicine**

About 60% of students with a concussion are seen by an MD.

But about 40+ are not! Parents may choose not to take their child to an MD:

- “Rub some dirt on it”
- No insurance
- Undocumented
- No access (rural vs urban)

All rights reserved: © GetSchooledOnConcussions.com
Return to Learn/Think (RTL/T) is of parallel importance as Return to Sport (RTS)

**YES! Medical clearance is legislated for RTS**
- School sponsored sports
- Physical Education Classes
  - Dance
  - Adventure Ed
  - Weightlifting
- Physical Play
  - Recess

**NO! Medical clearance is not legislated for RTL**
- All non-physical academic classes

70% of students with a concussion will reach full resolution of their concussion within 28 days (4 weeks)

How do we help our students in the classroom for up to 4 weeks?

All rights reserved: © GetSchooledOnConcussions.com
Good News:  
70% of students with a concussion 5-18 yrs will resolve their concussion in 4 weeks (Zemek, et al. 2016).

Staying home and “resting more” does not equal faster recovery. Resting for 1-2 days followed by a gradual re-introduction of activity (school, social) showed a faster recovery (Thomas et al. 2015).

Bad News:  
Students will feel well enough to be back at school (not “symptom-free”) within days, perhaps between 1-2 wks. They will not feel 100% yet: fatigue, dizziness, headaches, trouble remembering/concentrating.

They will be at school (good!) but they will be struggling in your classrooms and will need help!

All rights reserved: © GetSchooledOnConcussions.com
✓ What to do in the classroom?

✓ What to do about missed instruction?

✓ What to do about make-up work?

✓ What to do about quizzes/test?

✓ What to do about extracurricular activities?
Symptoms from a Concussion

A concussion IS a brain injury. It impacts the functioning of the cells in the brain - that is why a concussion does not show up on an MRI or CT scan. If there has been a jolt to the head and evidence of a symptom, then a concussion is usually the diagnosis.

Physical
• Headache
• Dizziness/Nauseated
• Light sensitivity
• Noise sensitivity
• Blurry vision

Cognitive
• Trouble remembering
• Trouble concentrating
• Easily distracted
• Mentally Foggy
• Processing slower

Emotional
• More irritable
• More sad
• More anxious

Sleep/Energy
• Fatigued
• Drowsy
• Trouble sleeping
• Sleeping too much

However, a concussion is generally considered to be a short-term, functional injury that gets better within days to weeks (up to 4 weeks) without long-term effects.
So do the math...

If students are back at school within days:

+ They *don’t* feel 100%
+ They *do* feel better every day, doing more with less symptoms
+ And most *are* completely resolved within 4 weeks ...

Where does concussion management really happen?

In the **general education** classroom!

*(Good News+++)* Most concussions are not a 504/IEP issue!

Good concussion management = quick, flexible, short-term
Are YOU Ready to Get Schooled On Concussions?
Ascending Levels Universal Level

Response to Intervention (RTI)

Tier 3
Intensive, Individual Interventions
Higher Intensity of Longer Duration

Tier 2
Targeted Group Interventions
At-Risk Students
Higher Efficiency
Rapid Response

Tier 1
Universal Interventions
Protective & Proactive

A few students need intensive supports

Some students need more targeted/tailored supports for a longer period of time

Most students will respond to general education supports

Response to Intervention (RTI) Batsche et al. 2005
Response to Management (RTM) McAvoy 2012

Tier 3
Intensive Interventions
Special Education/IDEA
Academic Modifications

Tier 2
Formalized Targeted Intervention
(504 &/or Health Plan)
Academic Accommodations

Tier 1
Inter-Disciplinary Teams
General Ed. Academic Adjustments

Academics Adjustments vs Accommodations vs Modifications

All rights reserved: © GetSchooledOnConcussions.com
Return to School vs. Return to Learn/Think

A concussion comes to your attention...

Return to School

- Body in seat!
- There is no RTL until there is 1st Return to School!
- Symptoms have to be managed well enough to GET to school and STAY at school.
- We want to empower parents and educate doctors to support students being back at school when symptoms are “tolerable, short-lived and amenable to rest” AAP guidelines

Return to Learn/Think

- Balancing symptom “flare-up’s” and levels of learning over (up to 4 weeks) of recovery
  - Maximize learning with Minimal symptoms
- RTL is all about empowerment to the Teachers!
- How do you differentiate your instruction to support your students with concussion?
Since symptoms are the manifestation of poor energy management...

- Slowed Processing Speed
- Mental Fatigue
- Short-term Memory

- Attendance/Instruction
- Work Output
- Tests/Grades/Credits
Educators don’t have to be an expert in concussion; rather, experts in teaching kids with fluctuating levels of brain energy.
Guess what? They already are!

Do educators have kids with learning disabilities? Kids with ADHD? They have fluctuating levels of brain energy all day, every day.

Educators have to feel comfortable “differentiating” for each individual student.
Guess what? They already do!
1. Mental Fatigue: Symptom Management

Symptom Management is the #1 priority, especially in the beginning weeks of concussion management! It is acceptable to be at school with “annoying” symptoms!

**Strategies: Rest breaks:**

- “Pacing” - Eyes closed/head down/water breaks 5 to 10 minutes, in the classroom, after periods of mental exertion
  - Take eyes off the computer or off the book and look across the room or close eyes for rest
  - Take more water breaks - allow for more generous bathroom breaks if water is increased.
  - Take a 5 minute “bean bag” or “head on desk” rest break in the classroom once an hour if needed.

- “Strategic Rest Breaks” – 15 to 20 minute proactive rest breaks in the clinic (perhaps in place of PE class, recess, orchestra) 1X in the am and 1X in the pm. The goal is to “schedule” a rest break at a logical time of the morning or afternoon to prevent the build up of symptoms. Be proactive instead of reactive.

- Only after being physically and cognitively present for instruction can a general education teacher fairly assess the REMOVAL of non-essential work and REDUCTION of semi-essential work.
2. Processing Speed

**Strategies:**

- Cut back on the amount of work. Grade completed work! Do not penalize (mark down a grade) for work exempted
- Go for quality, not quantity of work
- Go for comprehension of material, not memorization of material
- Prioritize what is most important:
  - To teach during the (potential) four weeks of recovery and
  - For student to learn during the (potential) four weeks of recovery
  - What needs to be “covered” to earn a fair grade by semester end and for advancement to the next level?
- It is not possible for students with a concussion to make-up all missed work (especially if the student has missed a number of days/periods from school)
- Therefore, quickly make a reasonable make-up work plan (REMOVAL of non-essential make-up work and REDUCTION of semi-essential make-up work)
- Do not let make-up work start to pile up – it leads to ANXIETY!
- Once a reasonable plan for make-up work has been determined, put PRIORITY on keeping up with **current learning**. As weeks pass, continue to determine with student – what non-essential current work can be removed? What semi-essential current work can be reduced?
- Expect student to have less symptoms over two to three to four weeks, and expect them to have more energy and to be able to keep up with more current work as weeks pass
- Do not expect the student to struggle in every single academic class. The brain may not be taxed at all by art class or history, but it may be taxed by calculus and computers. Allow academic supports in the classes where the brain energy is struggling (as manifested by symptoms) but keep the student progressing typically in classes where the brain energy seems high.
### 3. Short-Term Memory: Can I test for mastery?

**“Fair Testing”**
- Physically present?
- Cognitively present?
- Is it essential?
- Do I need to re-teach the content?
- Can they retain the material?

**“Alternative Appraisals”**
- If it is essential, has been taught and needs to be assessed ...
- Can an alternative appraisal suffice?
- If not, it it has to be a test, can adjustments to the test be made?
- If not, can tests (finals) be spaced out and no more than 1 or 2 per day?
- Do-over’s?
Fading Academic Adjustments

Week 1
Maximize academic adjustments
Remove non-essential work
Reduce semi-essential work
“Pacing” – Give FREQUENT eye/brain/water breaks - 5 to 10 minute breaks in the classroom after focusing for 20 to 30 minutes on reading or computer
“Strategic Rest Breaks “ – Allow a mid-morning and a mid-afternoon break (20 minutes each) in clinic at pre-determined times to keep symptoms at bay
Keep symptoms low and tolerable
Focus on just keeping the student feeling well enough to be in class - listening & learning. Focus less on work output at this point.

Week 2
Begin to “dip toe” in water; slowly try more work
Continue to remove majority of non-essential work
Continue to reduce majority of semi-essential work – Do not let make-up work pile up
Consider extending timeframes for essential work
Continue to allow eye/brain breaks in class, but begin to space those out when/if not needed
Wean back “strategic rest break” visits to clinic
Keep symptoms improving
Continue to prioritize comprehension and learning over work output
Continue to prioritize current work over make-up work

Weeks 3 and 4
Continue to adjust academic expectations
Continue to remove and reduce some work but continue to add in more work as healing and time progress
Continue to fade rest breaks
Continue to focus on comprehension
Continue to focus on current work rather than make-up work
It is not possible to keep up with current work and also make-up missed work – prioritize what make-up work is most important and make sure it is a reasonable amount
Continue to assure that symptoms are resolving

Seventy percent of concussions will resolve in 4 weeks with just good management.

Once a student with a concussion comes to your attention, FRONTLOAD your academic adjustments (view Symptom Wheel) during week 1 and week 2. Be as generous as you can be in the beginning of a concussion.
As week 1 progresses to week 4, the concussion should slowly resolve. Fade your academic supports away slowly over 1 to 4 weeks.

If the student does not show steady resolution of symptoms and/or if the student is not able to tolerate more academic expectations by week 4, talk to your Concussion Management Team Point Person, or school nurse/counselor/administrator.
What to Do About Missed Instruction?

A concussion will impact the student’s mental energy, their processing speed and their ability to learn new material for up to 4 weeks. After a few days of rest at home, most students will be back at school. Parents will want teachers to do all they can to support recovery with a reduction of in-class work/homework, exemption from work output and/or tests… aka "gifts" from teachers.

But "gifts" given by teachers cannot happen unless the student is AT school and has access to the instruction. During the initial 4 weeks of concussion management, the primary goal is to have the student be present at school for as many classes as possible to maximize exposure to instruction.

If the student with a concussion can be at school and can listen, can learn, teachers then have the option to REMOVE non-essential work and/or REDUCE semi-essential work. They will be less worried about a reduction in work output/tests if they know the student is still learning during the recovery by being available in class.

**Goal #1:** Symptoms need to be tolerable, manageable and intermittent.

**Plan:** "Pacing" – Student should take frequent eye/brain/water breaks – 5 to 10 minutes per hour in the classroom after mental exertion.

"Strategic Rest Breaks" – Student may also take a scheduled 20-minute rest break mid-am and/or mid-pm in school clinic, if needed.

**Goal #2:** Student should in school for as much of the day as possible.

**Plan:** School needs to understand the cognitive effects of concussion. School needs to support teachers in providing immediate academic adjustments. Teachers should consider a reduction in work, a removal of work & focus on comprehension of learning instead of large amounts work output (in-class and homework).

View *Symptom Wheel Issue* for more academic adjustments.

What do you do for a student who moves into your school/placed in your class on November 29th? They have missed a lot of your instruction. How do you plan for finals and end of semester grades?
What do you do for a student who has broken their dominant arm?

- **Student is newly concussed and is physically absent or cognitively unavailable to benefit from instruction.**
  - Consider giving the “gift” of little to no in-class work and homework. Consider exempting work and forgiving grade.

- **Student has been recently concussed, has missed some instruction but is now physically present and more cognitively available to learn.**
  - Teacher and student will need to determine what instruction was missed and what now needs to be taught or re-learned. Some in-class work and homework can now be expected but should still be reduced. Consider focusing primarily on what is essential to reinforce the new learning and not requiring much make-up work unless it is **essential** for learning.

- **Student has been recently concussed with some, but minimal, cognitive impact or was concussed weeks ago with some, but minimal, school or instruction missed and/or has now been back to school and available (physically and cognitively) to instruction.**
  - Teacher and student will need to determine what instruction was missed and what now needs to be taught or re-learned. As mental energy increases and symptoms subside, amount of in-class and homework can be increased. Priority needs to be on keeping up with current material. Consider the “gift” of only requiring a reasonable amount of make-up work; only work that is **essential** for mastery. Grade only on work done; do not penalize for work missed. Since extracurricular activities may not have been added back yet, there should still be time after school available for teachers and students to meet to learn material missed during recovery. This process is enhanced by written plans for each class so everyone knows what is expected.

**For example:**
- If you teach math – consider the “gift” of having student do only “even” problems!
- If you teach science/social studies – consider the “gift” of having student’s grades based only on group work!
What holds up recovery? 30%?

Concussion Symptoms
- Oculomotor
- Vestibular
- Auditory Processing
- Dysautonomia
- Convergence Insufficiency
- Neck/Headache

Pre-concussion issues exacerbated by concussion
- Headache
- LD
- ADHD
- Depression
- Anxiety

Misattribution of Symptoms Kid &/or Parent
- Anxiety
- Depression
- School Avoidance
- Social issues
- Bullying/Safety
- Secondary gain

Parent anxiety
- Can’t bear the student struggling
- Parent need
- Secondary gain
Refer to your Tier 2 Team

- Student Assistant Teams
- Problem Solving Teams
- 504 consideration?

Within your school setting, how do you go about networking with colleagues from other disciplines to help problem solve students with concussion? Who are those in your school?

L &/or S plus N = Length &/or Severity plus Need
### Symptom Progress Monitoring

**Symptom Checklist**

Name: ___________________________  Assessment Date: ___________________________

Date of Injury: ___________________________  Weekly Symptom Monitoring to the Concussion Management Team (CMT) is advised.

<table>
<thead>
<tr>
<th>SYMPTOMS</th>
<th>SEVERITY RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mild</td>
</tr>
<tr>
<td><strong>Pathways</strong></td>
<td><strong>Symptoms</strong></td>
</tr>
<tr>
<td>A</td>
<td>I feel like I'm going to faint</td>
</tr>
<tr>
<td>V</td>
<td>I'm having trouble balancing</td>
</tr>
<tr>
<td></td>
<td>I feel dizzy</td>
</tr>
<tr>
<td></td>
<td>It feels like the room is spinning</td>
</tr>
<tr>
<td>O</td>
<td>Thinks look blurry</td>
</tr>
<tr>
<td></td>
<td>I see double</td>
</tr>
<tr>
<td>H</td>
<td>I have headaches</td>
</tr>
<tr>
<td></td>
<td>I feel sick to my stomach (nauseated)</td>
</tr>
<tr>
<td></td>
<td>Noise/sound bothers me</td>
</tr>
<tr>
<td></td>
<td>The light bothers my eyes</td>
</tr>
<tr>
<td>C</td>
<td>I have pressure in my head</td>
</tr>
<tr>
<td></td>
<td>I feel numbness and tingling</td>
</tr>
<tr>
<td>N</td>
<td>I have neck pain</td>
</tr>
<tr>
<td>S/E</td>
<td>I have trouble falling asleep</td>
</tr>
<tr>
<td></td>
<td>I feel like sleeping too much</td>
</tr>
<tr>
<td></td>
<td>I feel like I am not getting enough sleep</td>
</tr>
<tr>
<td></td>
<td>I have low energy (fatigue)</td>
</tr>
<tr>
<td></td>
<td>I feel tired a lot (drowsiness)</td>
</tr>
<tr>
<td>Cog</td>
<td>I have trouble paying attention</td>
</tr>
<tr>
<td></td>
<td>I am easily distracted</td>
</tr>
<tr>
<td></td>
<td>I have trouble concentratng</td>
</tr>
<tr>
<td></td>
<td>I have trouble remembering things</td>
</tr>
<tr>
<td></td>
<td>I have trouble following directions</td>
</tr>
<tr>
<td></td>
<td>I don't feel “right”</td>
</tr>
<tr>
<td></td>
<td>I feel confused</td>
</tr>
<tr>
<td></td>
<td>I have trouble learning new things</td>
</tr>
<tr>
<td>E</td>
<td>I feel more emotional</td>
</tr>
<tr>
<td></td>
<td>I feel sad</td>
</tr>
<tr>
<td></td>
<td>I feel nervous</td>
</tr>
<tr>
<td></td>
<td>I feel irritable or grouchy</td>
</tr>
</tbody>
</table>

All rights reserved: © GetSchooledOnConcussions.com

Your input is valuable and critical!
# Academic Progress Monitoring

## Teacher Feedback Form

**Student:** You have been diagnosed with a concussion. It is **your responsibility to gather data from your teachers** before you return to the doctor for a follow-up visit. A day or two before your next appointment, go around to all of your teachers (especially the CORE classes) and ask them to fill in the boxes below based upon how you are **currently functioning** in their class(es). Or you may be asked to gather up teacher feedback weekly for your school concussion Management Team (CMT).

**Teachers:** Thank you for your help with this student. Your feedback is very valuable. We do not want to release this student back to physical activity if you are still seeing physical, cognitive, and emotional or sleep/energy symptoms in your classroom(s). Please work with your school administration on how they want you to use this form. Weekly teacher feedback to the Concussion Management Team (CMT) is advised.

<table>
<thead>
<tr>
<th>1. Your name</th>
<th>2. Class taught</th>
<th>Is the student still receiving any academic adjustments in your class? If so, what?</th>
<th>Have you noticed, or has the student reported, any concussion symptoms lately? (e.g., complaints of headaches, dizziness, difficulty concentrating, remembering, more irritable, fatigued than usual etc.)? If yes, please explain.</th>
<th>Do you believe this student is performing at their pre-concussion learning level?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [ ] No [ ]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Signature: _______________________________________________</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [ ] No [ ]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Signature: _______________________________________________</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [ ] No [ ]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Date: _____________________________</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Signature: _______________________________________________</td>
</tr>
</tbody>
</table>
### Symptom Progress Monitoring

#### Symptom Checklist

<table>
<thead>
<tr>
<th>Name:</th>
<th>Assessment Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date of Injury: ____________________________  
Weekly Symptom Monitoring to the Concussion Management Team (CMT) is advised.

#### Symptoms

<table>
<thead>
<tr>
<th>Pathways</th>
<th>Symptoms</th>
<th>Mild</th>
<th>Mild</th>
<th>Moderate</th>
<th>Moderate</th>
<th>Severe</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>I feel like I'm going to faint</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>V</td>
<td>I'm having trouble balancing</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I feel dizzy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>It feels like the room is spinning</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>O</td>
<td>Thinks look blurry</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I see double</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>H</td>
<td>I have headaches</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I feel sick to my stomach (nauseated)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Noise/sound bothers me</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>The light bothers my eyes</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>C</td>
<td>I have pressure in my head</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I feel numbness and tingling</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>N</td>
<td>I have neck pain</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>S/E</td>
<td>I have trouble falling asleep</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I feel like sleeping too much</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I feel like I am not getting enough sleep</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I have low energy (fatigue)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I feel tired a lot (drowsiness)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Cog</td>
<td>I have trouble paying attention</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I am easily distracted</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I have trouble concentrating</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I have trouble remembering things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I have trouble following directions</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I don't feel “right”</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I feel confused</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I have trouble learning new things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>E</td>
<td>I feel more emotional</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I feel sad</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I feel nervous</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I feel irritable or grouchy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Your input is valuable and critical!
We don’t want to put a student back to play or sport if they still have symptoms from a concussion.

If the student is not functioning back to their pre-concussion learning level, that is considered a cognitive symptom.
Group 2
Results are in...

+++ Increased participant knowledge of concussions

+++ Increased confidence about making academic adjustments

+++ Increased ability for concussion management networking
Next Steps

- Continued GSOC Training for Schools
- Enhanced Train the Trainer for TBI Staff
- Pilot School System Over an Academic Year

**Continue to measure results for practice and impact**
Core TBI Service System

- Interactive Community-Based Model
- Vocational Rehabilitation Service
- Children’s Rehabilitation Service
- State of Alabama Independent Living Program
- Alabama Head Injury Foundation**
Children’s Rehabilitation Service (CRS)
A division within the Alabama Department of Rehabilitation Services

...to assist children and youth in transition from hospital to home, to school, and to the community.

Eligibility:
Any child or adolescent younger than 21 years of age who is a resident of Alabama and has a special health care need.

Services may include:
Information & Referral, Concussion Clinic, Care Coordination, Treatment, Transportation Assistance, Community Education and Support, Evaluation and Assessment, Family Education
Alabama Department of Rehabilitation Services:  
www.rehab.alabama.gov/tbi

General Concussion/Brain Injury Resources:  
www.alabamaTBI.org

CDC:  www.cdc.gov/headsup

Children’s of Alabama:  www.childrensAL.org/concussion

COORPAAL - In The Classroom Series:  
http://intheclassroom.cbirt.org/

Kohl’s ThinkFirst program:  www.childrensAL.org/thinkfirst
Questions?

Maria Crowley  
205-290-4590  
maria.crowley@rehab.alabama.gov

Aimee Lott  
251-439-7886  
aimee.lott@rehab.alabama.gov

All rights reserved: © GetSchooledOnConcussions.com  For more information on GSOC contact Karen McAvoy, PsyD, at: Karen@GetSchooledOnConcussions.com