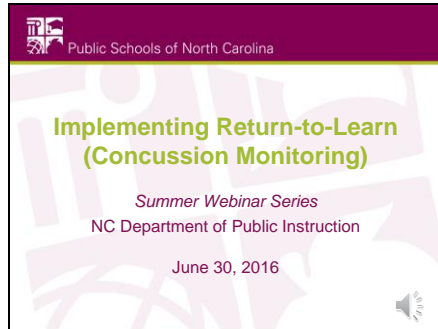


Slide 1



LYNN MAKOR:

Good Afternoon and welcome to the second in a series of summer webinars being offered through the NC Department of Public Instruction.

Today's webinar will focus on the recently approved North Carolina State Board of Education Policy titled Return-to-Learn After Concussion or policy number HRS-E-001.

The presentation today is aimed at bringing awareness to this policy and also guiding relevant education staff to tools that will support effective implementation of this policy.

We will be delivering information only today. Due to the limited window of time that we have, we will not be able to respond to any specific questions during the webinar.



Any specific questions that you may have – please feel free to post them in the questions section that is located on your webinar dashboard. After the webinar is complete, we will be taking all of the questions entered and add them (with answers) to the content slides here and will make them available.

If there happen to be a number of questions sent in, we will create a companion document for this webinar and also make that available when we post the information publicly.

Slide 2

**Contributors to Today's Presentation:**

- Liz Newlin - School Nurse, Wake County Public Health
- Lynn Makor - Consultant for School Psychology, NCDPI/CIDD
- Ashlee Taylor Layton - School Psychologist, Wake County Public School System

 Public Schools of North Carolina 

LYNN MAKOR:

The contributors to today's presentation include:

Liz Newlin, who is a school nurse through Wake County Public Health – Liz is also chair of the Children and Youth Committee of the North Carolina Brain Injury Advisory Council

Ashlee Taylor Layton, who is a school psychologist with Wake County Public School System – Ashlee is also the team lead for the TBI assessment team in Wake County, which consists of 27 school psychologists

And me, Lynn Makor, the consultant for school psychology with the NC Department of Public Instruction and the Carolina Institute for Developmental Disabilities. Part of this position's responsibilities is maintaining and supporting the TBI registry of approved providers that was developed through the NC Department of Public Instruction, Exceptional Children Division and has been in place for the past 23 years.



Additionally, I serve as co-chair with Liz on the Children & Youth Committee of the NC Brain Injury Advisory Council.

Slide 3

**State Board of Education Policy**

**NORTH CAROLINA STATE BOARD OF EDUCATION**  
Policy Manual

**Policy Identification**  
**Priority:** Healthy Responsible Students  
**Category:** Student Health Issues  
**Policy ID Number:** [HRS-E-001](#)  
**Policy Title:** Return-to-Learn After Concussion  
**Current Policy Date:** 10/01/2015  
**Other Historical Information:**  
**Statutory Reference:** GS 115C-12(12)  
**Administrative Procedures Act (APA) Reference Number and Category:**

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LYNN MAKOR:

I will now provide the listeners today with some background on this policy:

As audience members today, you may be aware of the Gfeller-Waller Concussion Awareness Act, which was passed into law by the NC General Assembly in 2011. The Act addressed return to play for student athletes participating in practice or games. It did not address all students, nor did it address return-to-school (or learn) guidelines for ALL students who might experience concussions regardless of where the concussion was experienced.

As a result, an input process occurred which involved school practitioners (including school nurses, school psychologists, school counselors),

neuropsychologists, and Department of Public Instruction staff (including members from the Healthy Schools Section of Curriculum and Instruction Division, the DPI Legal Team and Exceptional Children Division).

Through the input process, a recommendation was made for an education policy that would include guidelines for safe and appropriate return to the educational environment for ALL students post-concussion. This was proposed to the State Board of Education in September 2015.

**This policy was linked to the State Board of Education Strategic Plan under Goal 5, which reads:**

Every student is healthy, safe, and responsible.

Objective 2, which states that we promote healthy and active lifestyles for students.



The proposed policy returned for consent by the SBE at the October 2015 meeting. During this meeting, the SBE approved the policy, and you can see it's listing referenced on this slide.

Slide 4

**HRS-E-001 – Return to Learn after Concussion**

**Why Needed:**

- Concussion prevalence
- Impact of symptoms on school functioning
- Until now, no system in place to monitor students as they return to the educational environment post-concussion



LYNN MAKOR:

Before we walk through the specific pieces of the policy, we'll review some of the compelling "whys" of a need for such a policy.

We'll provide more detail by defining concussion, discussing their seriousness, and looking at their prevalence among school-age children and youth.

Although I have briefly mentioned Gfeller-Waller Concussion Awareness Act, we will also go into greater detail of what this act covers and what it doesn't - again supporting the need for such a policy.

Ashlee will now begin going into a bit more detail specific to these areas.



Slide 5

**Concussion Defined:**

- A concussion is a type of mild traumatic brain injury (mTBI) caused by
  - a bump, blow, or jolt to the head (or)
  - by a hit to the body that causes the head and brain to move rapidly back and forth

*This sudden movement can cause the brain to bounce around or twist in the skull, stretching and damaging the brain cells and creating chemical changes in the brain*

[http://www.cdc.gov/headsup/basics/concussion\\_whatits.html](http://www.cdc.gov/headsup/basics/concussion_whatits.html)

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ASHLEE T. LAYTON:

We all likely know someone – or have at least heard of someone – having a concussion.

We typically hear about the pretty bad ones, but minor concussions can lead to damage as well.

A concussion is a type of mild traumatic brain injury that changes the way the brain normally works. A concussion is caused by a bump, blow, or jolt to the head.

Concussions can also occur from a fall or blow to the body that causes the head and brain to move rapidly back and forth. Even what seems to be a mild bump to the head can be serious.



A brain is like a Jello mold in a bowl. Helmet doesn't always protect it, and may in fact, give a false sense of security

Slide 6

**Concussions Are Serious**

- Medical providers may describe a concussion as a "mild" brain injury because concussions are usually not life-threatening.
- Even so, the effects of a concussion can be serious.

[http://www.cdc.gov/headsup/basics/concussion\\_whatits.html](http://www.cdc.gov/headsup/basics/concussion_whatits.html)

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ASHLEE T. LAYTON:



Concussion symptoms may appear mild... in fact, nearly 65-75 % of concussions are relatively mild in nature. But the injury can lead to problems affecting how a person thinks, learns, acts, and/or feels.

You can't see a concussion and some students may not experience or report symptoms until hours or days after the injury; others may not be noticed for months following an injury. Sometimes, students may not recognize or admit they have a problem which might make them nervous, frustrated or upset.

Slide 7

### Concussion Prevalence

- More than 3 million (known) cases a year in the United States
- Most common type of mild brain injury
- Can lead to other, temporary cognitive symptoms



ASHLEE T. LAYTON:



In 2011 and 12, as reported by the Injury Prevention Center at UNC, there were over 16,000 emergency department visits for children between the ages of 5 and 19. This data does not include children who were seen by their primary care physicians or at urgent care facilities.

In the United States, more than 3 million cases are reported, making a concussion the most common type of mild brain injury.

Slide 8

### Concussion Symptoms and their Educational Relevance:

Physical:	Sensory:	Emotional:	Cognitive:
<ul style="list-style-type: none"><li>- Headaches</li><li>- Balance issues</li><li>- Fatigue</li><li>- Dizziness</li><li>- Difficulty Sleeping</li><li>- Numbness/tingling</li></ul>	<ul style="list-style-type: none"><li>- Blurred vision</li><li>- Sensitivity to sound or light</li></ul>	<ul style="list-style-type: none"><li>- Sad</li><li>- Angry</li><li>- Worried</li><li>- Irritable</li><li>- Nervousness</li></ul>	<ul style="list-style-type: none"><li>- Mentally "foggy"</li><li>- Difficulty with memory</li><li>- Difficulty remaining focused</li></ul>



ASHLEE T. LAYTON:

A concussion, no matter how mild it may seem at the time, is a brain injury.

In addition to the physical symptoms a student might have after sustaining a concussion, the research supports addressing the cognitive symptoms that impact a student's ability to maintain performance in the classroom.

Cognitive demands, much like physical demands, can worsen symptoms and can delay recovery (Majerske et al., 2008).

For example, disturbances in sleep patterns often result in fatigue and drowsiness during the day, factors which may compound all of the other problems the student may experience. Sensory symptoms may interfere with the student's ability to focus and concentrate, while cognitive symptoms may impact the ability of the student to learn, memorize and process information, as well as keep track of assignments and tests. Struggles with school work may worsen the frustration, nervousness and/or irritability that were originally caused by changes in brain chemistry.

Unfortunately, little attention has been given to academics and learning and how a concussion may affect the young student learner. Developing appropriate guidance and evidence-based recommendations for a RTL for a student following a concussion is a challenge, given the limited research

that exists in this area of concussion and its management.

Slide 9



**Concussion Recovery**

- Most symptoms will resolve within a few weeks
  - However, may get worse before they get better
- Cognitive rest
  - Like other injuries in that rest to the area affected is needed; however, difficult to 'rest' your brain – more intentional awareness needed for this
- Individualized approach
  - Longer recovery if: multiple concussions, history of headaches, previous learning or mental health issues, substance abuse

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ASHLEE T. LAYTON:

Recovery time for a concussion is usually no more than a few weeks. BUT... Things might get worse before they get better.

Concussions are like other injuries – If you have an injured knee, you rest – you might try it out after a few days – you might see a doctor – you're just going to take it a bit slower.

But concussions are still different - it's a lot harder to 'rest' your brain. It's not like we have ice packs or crutches for the brain. If you just keep doing what you normally do. It's like running on an injured knee.

Cognitive rest, or avoiding potential cognitive stressors, such as texting, video games, TV exposure, and schoolwork - is one of the best ways to help rest the brain. This means, no sports... lots of sleep... and the student may need to take time off of school.

However, the research is still inconclusive about the ultimate outcome of cognitive rest, so an individualized approach for the student is best.

What makes recovery longer?


If a student has had a previous concussion – or a history of multiple concussions in a short amount of time – if they have a history of headaches, or learning/mental health issues – substance abuse can also prolong recovery.

It will be important to work as a team to prioritize activities each day, planning out what the student will do within those prioritized activities, pacing the work, and positioning an environment that doesn't drain the student.

Slide 10

**Gfeller-Waller Concussion Awareness Act**  
*what it covers...and what it doesn't*

Major area covered:	What is not addressed under GWCA Act
All student athletes who sustain a concussion within the realm of school related sports	ALL students who sustain a concussion...anywhere (in or outside of school)
Education of coaches, school nurses, volunteers, student athletes, parents	Educational information/materials for ALL educators working in NC public schools
Emergency Action Plan to include a post-concussion protocol (specific to removal from play for student athletes)	Removal from play/physical activity for ALL students who sustain a concussion
Return-to-play procedures for student athletes	Protocol specific to the return to the educational environment (for ALL students who sustain a concussion)

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ASHLEE T. LAYTON:

As Lynn mentioned, The Gfeller-Waller Concussion Awareness Act was signed into law in June 2011 and is designed to increase the safety of North Carolina's student athletes. The three major areas of this law cover education, emergency action and post-concussion protocol implementation, and return to play procedures.



While the Gfeller-Waller law has improved the safety outcomes of student athletes and their return to the playing field, it fails to address their return to the classroom. And what about the students who are not student athletes?

This board policy addresses the safety outcomes of ALL students, regardless of where they received their injury. The policy follows a similar pattern by addressing education, emergency action and post-concussion intervention, and return to learn procedures.

**HRS-E-001 – Key Components:**

*Public schools must:*

- A. Develop a plan, to include four main requirements
- B. Identify a team responsible for identifying and monitoring students who sustain mTBI
- C. Provide relevant staff development on mTBI and district/school procedures (annually)
- D. Include a system of surveillance (question about head injury) collected annually

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LYNN MAKOR:

Now that Ashlee has covered in greater detail the “why’s” surrounding this policy – we’ll now review the “what” and the “how.”

It is important to note that this policy is specific to concussion and does not include other types of head injuries, many of which can be more serious and have longer lasting educational effects.

The main components of this policy are listed here on this slide, initially beginning with the fact that all public schools must Develop a plan in the monitoring of students who sustain a concussion. And the plan will include four main requirements, which Ashlee will be going over in greater detail in a few minutes.

The second component is around identifying a team responsible for identification of the students and monitoring of the students, who sustain a mild TBI or concussion.

Third, public schools must provide relevant staff development on mTBI or concussion, and their district or school procedures around the concussion monitoring policy, to their staff on an annual basis.

And finally, the last component indicates that this public schools must include a system of surveillance such as a question about head injury, um, that is collected annually on all students in their buildings.

Ashlee will now provide an overview of each of these components...





Slide 12

**A) Develop a plan**

*All schools must develop a plan for addressing needs, which must include:*

- 1) *Guidelines for removal*
- 2) *Notification procedure*
- 3) *Medical care plan/school accommodations*
- 4) *Delineation of return to learn or play requirements*

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ASHLEE T. LAYTON:

Each Local Education Agency (LEA) and charter school must develop a plan for addressing the needs of students preschool through twelfth grade suffering concussions.



The plan must include:

- 1) guidelines for removal of a student from physical and mental activity when there is suspicion of concussion;
- 2) a notification procedure to education staff regarding removal from learn or play;
- 3) expectations regarding annual medical care update from parents, and a medical care plan/school accommodations in the event of concussion; and
- 4) delineation of requirements for safe return-to-learn or play following concussion.

Slide 13

**B) Identify Team of Professionals**

*Each school must appoint a team of people responsible for identifying the return-to-learn or play needs of a student who has suffered a concussion. This team may include the student, student's parent, the principal, school nurse, school counselor, school psychologist, or other appropriate designated professional.*

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ASHLEE T. LAYTON:


The second component of the board policy is forming a team of professionals responsible for identifying the return-to-learn or play needs of a student who has suffered a concussion.

In addition to the people listed above, other team members may include a student's coach (if they are an athlete) or the student themselves (if deemed appropriate).


Slide 14

**C) Provide Annual Staff Education**

*Each LEA and charter school must provide information and staff development on an annual basis to all teachers and other school personnel in order to support and assist students who have sustained a concussion in accordance with their learning and behavioral needs. This annual training should include information on concussion and other brain injuries, with a particular focus on return-to-learn issues and concerns.*



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ASHLEE T. LAYTON:

Each LEA and charter school must provide information and staff development annually to all teachers and other school personnel in order to support and assist students who have sustained a concussion.


This annual update will remind ALL school personnel of the concussion policy and the specific procedures developed by the school to implement the state concussion policy.

The LEA or charter school may also want to create a list of resources in the community that are familiar with concussions in youth and make sure that this information is available and accessible to staff. This annual training would be an appropriate time to remind staff of the information that is available and where to locate it.


Slide 15

**D) Collect Concussion Info. Annually**

*Each LEA and charter school will include in its annual student health history and emergency medical information update a question related to any head injury/concussion the student may have incurred during the past year.*



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ASHLEE T. LAYTON:



Most schools have a student information card/document completed yearly by the parent/guardian that supplies contact information.

On this card/document an update on current medical needs or past history of concussion could be a question. If a concussion or other head injury is noted on this documentation, follow up by the team of professionals should occur.

Slide 16

**(a) 1) Guidelines for removal**

*The plan must include:*  
guidelines for removal of a student from physical and mental activity when there is suspicion of concussion;



ASHLEE T. LAYTON:

Any teacher, coach, school administrator, school counselor, school psychologist, school nurse, attendance officer, or other school professional who suspects that any student has suffered a concussion or other brain injury shall immediately remove the student from any activities that may result in a risk of further injury – this includes physical education, recess, athletic competitions, etc.

In some instances, the student should not be moved and medical attention should be given immediately.

Signs and symptoms of a possible head, neck, and/or back injury include:

- Change in consciousness
- Severe pain or pressure in the head, neck, or back
- Blood or other fluids in the ears or nose
- Impaired breathing or vision
- Bruising of the head, especially around the eyes or behind the ears



Slide 17

**(a) 2) Notification procedure**

*The plan must include:*  
a notification procedure to education staff regarding removal from learn or play;

Information may be brought to school's attention by:

- Student informing staff member
- Paperwork from a MD
- Parent informing a staff member



ASHLEE T. LAYTON:

The plan must include a notification procedure to education staff regarding removal from learn or play;

For any student who has been removed from an activity due to a suspected head injury, the parent/guardian should be informed immediately of the event and advised to seek medical attention, which may include the school nurse, primary care provider or other medical professional.

If the student was injured outside of school, the school may receive notification about the concussion by:

- the parent or student informing a staff member or
- paperwork from a doctor or emergency department.



However notification is received, a contact from the team of professionals designated

to support students with concussions should be notified immediately.

Slide 18

**Notification:**

- Upon notification of concussion, the team of professionals:
  - Assigns a case manager (if applicable)
  - Immediately sends an alert (email) to:
    - Parent(s), teacher(s), and school nurse
    - Others as needed : psychologist, coaches, athletic trainers (HS) and sports safety technicians (MS)



ASHLEE T. LAYTON:



Once the school is notified of the suspected concussion, the team of professionals should immediately alert other educators who may need informed.

Slide 19

**Notification:**

This alert will:

- Inform parties of suspected/diagnosed concussion
- Include symptoms for parents and teachers to watch for
- Ask teachers to note needed accommodations/ modifications
- List recommendations from physician (if provided)
- Identify case manager (if applicable)
- Give directions to contact the assigned case manager with questions/concerns



ASHLEE T. LAYTON:

This alert will Inform parties of suspected/diagnosed concussion, include symptoms for parents and teachers to watch for, ask teachers to note needed accommodations/ modifications the student may use to be successful in the classroom. list recommendations from a physician (if they have been provided), identify a case manager which may be applicable in larger schools, and give directions to contact the assigned case manager with questions/concerns

Slide 20

**(a) 3) Medical Care Plans/School Accommodations**

*The plan must include:*  
medical care plan/school accommodations specific to the student's MD recommendation and symptoms. If no MD recommendations are given, the nurse in consultation with the student and parent should develop the care plan based on student symptoms.



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ASHLEE T. LAYTON:


The expectations regarding annual medical care update from parents was addressed previously, as mentioned in the annual updates on locator cards or contact information documents.

at this point we will spend our time reviewing the school accommodation plans for students with concussions.


Slide 21

**(a) 3) Plans of Care**

- If the student is still having symptoms, more specific supports may be needed. These may be documented through:
  - *Medical Plan of Care* - coordinated by the school-based health care professional
  - *Educational Plan of Care* - coordinated by the designated school professional (may be concussion contact or case manager)



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ASHLEE T. LAYTON:


If the student is having significant symptoms, the team of professionals may determine that specific accommodations and modifications are needed to support the student as they recover. They may be documented in either a medical plan of care, or an educational plan of care.

Slide 22


**(a) 3) Plans of Care**

Medical: a document outlining the accommodations a student may need to address the medical symptoms they are experiencing following a concussion

Educational: a document to address the academic and/or functional difficulties a student may experience while recovering from a concussion



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ASHLEE T. LAYTON:

A medical plan of care is a document outlining the accommodations a student may need to address the medical symptoms they are experiencing following a concussion.

A medical plan may not be needed, initially, or at all. The nurse will make the determination with the parent, and based on doctor recommendations.

An educational plan of care is a document to address the academic and/or functional difficulties a student may experience while recovering from a concussion.

Slide 23

**(a) 3) What does an Educational Plan of Care look like?**

Problem	Accommodation	Responsible Party
Specific problems are listed under four general categories: •Activity •Sensory •Emotional •Cognitive	Specific accommodations are listed under the four general categories	Lists who will be responsible for implementing the accommodations

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ASHLEE T. LAYTON:

An educational plan of care addresses the problems, accommodations and responsible parties for accommodating students with a concussion.

Specific problems are listed under the four general categories of symptoms, which include activity, sensory, emotional, and cognitive.

In the accommodation column, the team identifies the specific supports and strategies needed to support the specific symptom.

The responsible party lists who will be responsible for implementation and follow-up.

Slide 24

**(a) 3) Developing an Educational Plan of Care**

1. Discuss the symptoms the student is experiencing in each of the four general area
2. Determine which accommodations the student will be provided
3. Determine who will be responsible for implementation of each support/accommodation

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ASHLEE T. LAYTON:

Development of an educational and /or medical plan of care should occur in a face to face meeting with case manager, parent, student, teachers and nurse. Include others (such as coaches, athletic trainers, or psychologists as needed.)

Let's walk through an example...

If the student has slowed processing speed which is a common symptom of brain injury/concussion, an accommodation plan may need to be developed. Slowed processing speed will still allow a student to learn and complete work but at a much slower pace, and often with much more mental energy expended. Suggested interventions include:

- Cutting back on the amount of work given in class and for homework. With slowed processing speed, it will take the concussed student much longer to complete work, and too much will undoubtedly cause mental overexertion. The teacher should decide what concepts are most important to teach and the student to learn during the recovery. Strive for quality of work, not quantity at this time.
- Extra time on projects/tests. Note that it is unfair to give a concussed student a test during recovery. Even if the


concepts have been learned, giving the test at this time will likely be an unfair assessment of mastery.

- Allowing the students to use of a tape recorder, note buddy, or copy of teacher's notes, can be a way to help them to process more quickly.
- In addition, using organizational helpers and/or technology can make output easier and more efficient.
- One of the easiest ways to help with slower processing speed is to adjust due dates.

Slide 25

**(a) 3) Available Resources**

- Neurocognitive evaluation, or doctor's note, listing recommended accommodations
- Parent report
- Teacher report
- Student report
- Information from nurse, coach, or school psychologist



ASHLEE T. LAYTON:

An individualized, yet team approach, is best when helping students return to learn after concussions. The team has a variety of resources available to them to help make data based decisions.

Doctors are not necessarily going to be able to help with differentiation of material, but they can be helpful in suggesting other appropriate accommodations.

The parent can provide information to the team about how a student is behaving and performing at home, while a teacher is first observer of students in the school setting.

Students can also provide valuable information about their symptoms and what triggers they have that aggravate symptoms.

The school nurse and psychologist can provide research-based information about best practices and help teams through the problem solving process.

Slide 26

**(a) 3) After Plan is Developed**

- Give a copy of the plan to the parent(s)
- Make sure all teachers are aware of the plan
- If the plan crosses semesters, make sure to inform the new teachers of the Educational Plan of Care
- If appropriate, make sure student is aware of plan and has steps to advocate for him/herself

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ASHLEE T. LAYTON:

Working with the school team, make sure to give a copy of the plan of care to parents.

Make sure all teachers are aware of the plan and understand how to implement the accommodations and modifications.

If the plan crosses semester or years, it will be imperative for new team members to be aware of the plan.

If appropriate make sure student is aware of plan and has steps to advocate for him/herself

Slide 27

**(a) 4) Delineate Safe Return to Learn**

*The plan must include:  
delineation of requirements for safe return-to-learn or play following concussion.*

RETURN TO SPORTS

PLEASE NOTE

1. Athletes are not allowed return to practice or play the same day that their head injury occurred.
2. Athletes should never return to play or practice if they still have **ANY** symptoms.
3. Athletes, be sure that your coach and/or athletic trainer are aware of your injury, symptoms, and has the contact information for the treating physician.

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ASHLEE T. LAYTON:

The plan must also include delineation of requirements for safe return-to-learn or play following concussion.

Educators are the newest team members to come to the table on concussion. The experts in concussion management know now that they cannot thoroughly treat the *athlete* unless they also treat the *student*. Current best practices of RTP require that the student be symptom-free before starting back to physical activity (McCrary et al., 2009). If the student is still receiving academic adjustments of any kind due to the presence of any symptoms, they cannot be considered symptom-free. Therefore, a successful Return to Learn is necessary before approval for Return to Play.



Slide 28

**(a) 4) Monitoring Plans of Care**

- This plan is reviewed as often as necessary

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ASHLEE T. LAYTON:

Ideally, the educational plan will be short term. It is removed when the student can complete a period of time of school symptom free.

A general guideline is that if a student is physically or mentally exerting to the point of flaring a symptom, then physical or mental activity should be cut back.

It is recommended that if an Educational Plan of Care is not meeting the student's needs at any point during the monitoring process, the student be referred to the school's problem solving team in order to identify appropriate targeted interventions for the student.

Lynn is now going to discuss the individual roles and responsibilities of the team members, and then tell us how to access the implementation guide

Slide 29

**(b) Team of Professionals**

**Concussion Contact -**

- Receive all notifications of concussion
- Assign case managers (if applicable)
- Send "Notification" email
- Follow-up with case managers as needed to insure integrity of process

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LYNN MAKOR:

OK, now let's walk through some examples of "who" this team of professionals might be and what to consider as their "role" within this process of concussion monitoring. Please note that these are *only* recommendations to guide you in establishing the appropriate team of professionals.

The key take away here is the importance of a team working together to ensure that the process is effective and efficient so that a student's transition back into their educational environment during the recovery period is set up to support any needs that they may have resulting from the concussion.

A main contact is certainly recommended – what is referred to here as the "concussion contact"

This professional would be the receiver of all concussion notifications that have come to the school. For example parents may drop a doctor's note with the receptionist in the main office, or inform a teacher or other

staff member – that information then would go directly to the concussion contact.

They may then, assign a “case manager” to the case.



The concussion contact might also send a notification email to all relevant staff members making them aware that the student they are working with has sustained a concussion.

Slide 30

**(b) Team of Professionals**

**Case Manager –**

- Follow up with parent as needed to insure student’s needs are being addressed
- Coordinate the development and follow-up of an Educational Plan of Care



LYNN MAKOR:



If a case manager is assigned, they would be the one to ensure that needs are being addressed and would also be the one responsible for coordinating the development of and follow-up on the Educational Plan of Care

Slide 31

**(b) Team of Professionals**

**Parent -**

- Provide medical documentation to case manager and/or school nurse
- Participate in developing in the Medical and/or Educational Plans of Care
- Provide updates from physicians
- Notify school case manager if changes in behavior or school performance are noted



LYNN MAKOR:

The parent would be responsible for providing any and all medical documentation to the case manager and/or school nurse.

The parent should also be an active participant in the development of the medical and/or educational plan of care for that student. They should provide all updates from physicians directly to the school staff.


And the parent should also be relied on to provide input to the school regarding any symptom related changes in behavior or performance that they note in their child within the context of the home environment.

Slide 32


**(b) Team of Professionals**

**Teachers –**

- Implement needed adjustments outlined in initial email
- Alert parent and case manager to any concerns regarding behavior or school performance
- Participate in development of the Educational Plan of Care
- Provide accommodations as outlined in the Educational/Medical Plan of Care



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LYNN MAKOR:

The teachers are responsible for implementing the initial adjustments that the student may need when they receive that initial notification of concussion.

They are relied on to provide input regarding any symptom related changes in behavior or performance that they note with child in the context of the school environment.


And they should actively participate in developing the Educational Plan of Care, and, would then be responsible to provide any accommodations or additional supports that are outlined in the educational plan of care and/or the Medical Plan of Care.

Slide 33


**(b) Team of Professionals**

**Nurse –**

- Contact parent and provide educational materials per nursing guidelines
- Complete nursing assessments
- Coordinate development and follow-up of Medical Plan of Care



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LYNN MAKOR:

The school nurse is responsible to provide educational materials to the parent per their nursing guidelines


They also complete nursing assessments and act as the coordinator in the development of and follow-up on Medical Plans of Care.

Slide 34


**(b) Team of Professionals**

**School Psychologist –**

- Participate in the Educational Plan of Care development as needed
- Consult with district level DPI TBI Approved Providers, as necessary



Public Schools of North Carolina



LYNN MAKOR:

When relevant, the school psychologist may participate in the development of educational plans of care, as well.


They would also consult, as needed, with other school psychologists at the district level who are the designated approved provider/s for TBI.

Slide 35


**(b) Team of Professionals**

**Coaches/Athletic Trainers/Sports Safety Technicians –**

- Follow concussion notification process and return to play protocols
- Participate in development of Educational/Medical Plans of Care, as needed



Public Schools of North Carolina



LYNN MAKOR:

Coaches/Athletic Trainers/Sports Safety Technicians are to follow the concussion notification process and return to play protocols.


They also might participate in the development of the educational and/or medical plans of care, as needed and appropriate.

Although not listed on any of these slides, we do want to stress that, when appropriate, it is also important to include the student as part of the team in order that they can provide necessary input into their own recovery plan.


Slide 36

**Resources**

- [State Board of Education Policy HRS-E-001 Return to Learn After Concussion](#)
- [Return to Learn After Concussion - Guidelines for Implementation](#)



Public Schools of North Carolina



LYNN MAKOR:

Today we have spent some time providing information regarding the Return to Learn After Concussion, NC State Board of Education Policy.

Additionally, we've talked about why appropriate concussion monitoring within the context of the educational environment is so important and the prevalence rates that exist in children and youth.

Within the resource section here, we have linked to the actual policy in this first bullet.

In addition to the policy, there has been an implementation guide developed to assist schools as they move forward in

establishing return to learn procedures at the local level. The implementation guide is also linked here in the second bullet.

Slide 37

**Implementation Guide**

- Step-by-step instructions to access it:
  - Go to <http://www.ncpublicschools.org/>
  - Go to “Departments” drop down and click on [Healthy Schools](#)
  - On left side of page, click on State Board/Legislation
    - Open [State Board](#)
    - Implementation Guide will be posted here

DPI Public Schools of North Carolina

This Implementation Guide is considered a living document and will be updated regularly, as new questions arise – or – as relevant information becomes available. We hope that it will serve as a useful resource in supporting the educational needs of students who sustain a mTBI (concussion).

On this slide, you can see the step-by-step instructions on how to access the Implementation Guide electronically by going first to DPI’s main website, then scrolling down the “departments” drop down menu to the “Healthy Schools” website. Once on this website, you will see a menu on the left side. By clicking on the “State Board/Legislation” tab, you will then open up the “State Board” page and see both the Return to Learn After Concussion Policy and Implementation Guide posted here.

I will now quickly demonstrate these steps to get us to the document and will also provide a brief overview of the layout of the document.

Okay, so go going to our, um, internet, we will go to uh, the DPI website. The main website’s here, as you can see. You’ll go to the department drop down and find the Healthy Schools webpage or website. Click on that. Once you get to the healthy schools website, you’ll see over here on the left as I mentioned, the state board/legislation tab. Click on that. And then the state board page. There, you will

see um, midway down, healthy and safe rela- um, health and safety related to concussions. Um, you can see the PDF link here to the actual policy, which will take you right to the state Board of Education manual - Um, their electronic manual and bring you through the actual policy. And basically each component of this policy is what Ashlee and I went through in this presentation today. It's a one- page document, um, very brief, but it lists the components and the requirements for Return to Learn, um, as students re-enter the educational environment after sustaining concussion.

What I was referencing was the implementation guide here, so if you click on there, you'll be able to pull up the electronic version of the implementation guide in its current form.

The way that this implementation guide is laid out is to take each component of the policy.

It first starts with an introduction to concussion and a general overview of concussion symptoms, reference to Gfeller-Waller, and indication of the need for the policy as well as the intent of the policy.

The purpose of the implementation guide is then listed and then as you move into the beginning components, you will see um, as you scroll through, each section of the policy is first indicated.

And, after the section, there is, basically an explanation of what that component of the policy means.

It then offers districts and schools some examples of what implementation may look like in terms of that specific component of the policy. And again, these are examples of how this component may be implemented.

And at the end of each section, there is a resource um, section, that will give you websites that you can link to easily that are general national type websites, um...here are also some websites that are offered up from other states around concussion management, as well as some school

districts who have resources that you can link into and see some examples of how some districts are already implementing a Return to Learn - concussion monitoring policy in their systems.

And it follows..the implementation guide follows that same sequence for each specific component of the policy.. as you can see here.

So the second component is listed with an explanation, and examples of implementation that districts and schools may, kind of reference, as “okay, this might be a way that we could implement this component of the policy.” ...and then some resources that are actually specific to that section of the policy....and so on and so forth. The policy, the implementation guide follows that process throughout the rest of the guide.

At the end of the guide, there has been a literature review conducted and it's summarized at the very end, that kind of gives um, a summary of the existing literature on when symptoms and recovery may reach a point of a need for a higher level of intervention, in a very small percentage of cases of students who sustain concussion, a very small number, their symptoms may persist and accommodations or educational plans of care, or medical plans of care, may not meet their needs. Therefore, a problem solving team may need to get involved and design more targeted interventions for a student, around either their functional or their academic needs that result from the concussion specifically....um, and if those interventions are not meeting that student's needs and proving to be successful in getting that student back to the level of functioning they were at prior to the concussion, then a decision would need to be made about whether or not the student would need to be referred for consideration of special ed services, through an initial referral for special education.

So what this last part of the implementation guide really just does is just summarizes the literature to give you an idea of kinda, what's out there, what the research is saying currently about recovery period for

concussion, um, and what has been, you know effective in terms of supporting the needs of students with a concussion.

And what to expect. Um, and when uh, a student that you have falls outside that realm of the expected recovery period, then you know that there needs to be, um, some potential initial steps involved. Whether it be, you know accommodations or educational plans of care, or medical plans of care, through the concussion monitoring that would be enough for that student to support their needs....Or whether or not it needs to be more extensive than that.

And again, this is a very small number of students that would have symptoms that persist and impact their learning to this extent. As Ashlee referenced earlier in the presentation as well, there are um, other factors um, that could impact the level the recovery period for um, students. If there are have been multiple concussions sustained, or if there are other complicating features that are associated such as mental health disorder, substance abuse, um, or other types of diagnosed conditions, um, that could further complicate the recovery period for these students. So, that takes you, basically, through the policy and where to access um, and reference the policy, as well as the implementation guide.

And we'll get back into and conclude our presentation.

Slide 38



So as stated earlier in the webinar, for any specific questions that you may have – please post them in the questions box that's located in your webinar dashboard. After the webinar is complete, we will be taking all of the questions entered and add them to the content slides that we've developed, with answers, for posting.

If, by chance, there are a number of questions sent in, we will create a companion document that will go along with the materials that we've reviewed today as part of the webinar and also make that document available when we post this information publicly.



This webinar has been recorded and will be transcribed, and will be available and posted, actually, in many places, but one place where you will be able to find it easily is by accessing it through the healthy schools, um, website. I will also have it linked into the TBI page that I have, and I'm sure it will be linked through other, um, places. But those would be the most um, readily accessible, uh, webpages for you to access the archived webinar, with this recording and a transcript, the content slides, and then of course you have the information now on accessing the electronic state board of ed. policy where it references the actual return to learn policy, as well as the um, electronic version of the implementation guide in its current form.

We thank you all for taking time to listen in today, hope that this information has been helpful for you, as you begin a new school year, and now understand, um, a newly approved policy that is effective beginning this school year for all public schools, including charter schools.

And we hope you all have a wonderful afternoon - thank you.