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I have **no** financial disclosures that would be a potential conflict of interest with this presentation.
Who is CBIRT?

A Center associated with the University of Oregon - Established in 1993

Legislative and policy work

Conducts research and training to improve the lives of children and adults with TBI

Oregon TBI TEAM

OCAMP (Oregon Concussion Awareness and Management Program)

Promising and evidence-based practices for students and people with TBI
Objectives

TBI implications for Returning to School

Educator Training

Family Support

Collaboration
Implications of TBI on Students?
Brain Injury Severity Continuum

- Concussion and mTBI (mild)
- Complicated mild to moderate
- Moderate to severe

Continuum of severity
TBI Impacts All Aspects of Functioning

N = 526 parents of children hospitalized for TBI (Hawley et al. 2004)

Behavioral, emotional, memory and attention problems reported by:

- 33% severe injuries
- 25% moderate injuries
- 10-18% of mild injuries
Cognitive Consequences

- Problems with attention, working memory and executive function skills
- Inconsistent learning profiles
- Speech and communication difficulties
Behavioral Consequences

• Impulsivity, poor self-regulation
• Anger issues and aggression
• Depression, anxiety, internalizing symptoms
• Post traumatic stress disorder
• Apathy and withdrawal
Social Consequences

- Social skill and social problem-solving deficits
- Impaired emotion recognition
- Changes in peer relationships
- Lack of participation
- Difficulties making and maintaining friendships
- Social isolation
Academic Outcomes

More severe injuries associated with more significant academic problems
• 79% of children with severe injuries failed a grade or received special education services (Ewing-Cobbs et al., 1998)

Even children with milder injuries are at risk
• 14% of children with mTBI needed support services at school 12 months post injury (Rivara, Koepsell, Wang et al., 2012)
Developmental Issues

Especially when a child is injured at a young age, problems may not be apparent until later (Anderson et al., 2009; Anderson et al., 2010; Catroppa et al., 2008)

Children with complicated mild – moderate injuries needed more support services as they were further from injury (Prasad, et al., 2016)
Growing into disability

Two days before her first birthday she was in a head on collision. We didn't realize anything was wrong until she started kindergarten and had a horrible time concentrating and learning.

--- Kansas parent
Long Term Outcomes

Low rates of:
- Enrollment in post-secondary education
- Employment
- Independent living
- High rates of criminal behavior and incarceration
Implications of TBI on Families?
Effects of brain injury on families

- Increased distress
- Parental anxiety and depression
- Deterioration in family functioning that may persist many years following the injury
- Financial strain
We need tools for working with clients outside the walls of the hospital or clinic, in the environments where they go to school, live and work.

-- Mark Ylvisaker
https://tbieventsportal.org/
Overview:
Return to School Laws
All 50 states have a Return-to-Play law that includes...

1. Education
2. Removal from play
3. Return to play

11 states have a Return-to-School law

- Some apply to only student athletes
- Few have directives included
- Few have supports built in
Return to School: HB 4140
The goal is to not let a temporary injury alter a student’s life trajectory!
Advocating for Children & Youth

• Return-to-School legislation (2020)

• Requires Immediate Temporary Accommodations upon a concussed student’s return to school.

• Went into effect August 2021
This Bill will have positive impact on students with brain injury because...

- It provides the opportunity for an injury that typically is short term to not end up being a life trajectory altering event.

- It allows students to maintain their future life trajectory unhindered as they recover from brain injury.

- It provides temporary short term supports that students need and that the special education system does not cover because the special education system is designed to support students who have long term educational need.
Best Practices are defined by evidence-based research.

Standard forms will provide consistency in the application of the accommodations.

Integration of the Immediate Temporary Accommodations Plan (ITAP) are necessary to ensure that the accommodations are initiated immediately after the school is informed of the student’s mTBI.
Section 1. ODE must develop and distribute an accommodation form to be used in schools for students who need support following a brain injury.

Section 2. Took affect August 2021

Section 3. Available for use by school employees, parents, guardians and students.

Section 4. Can be used when a student has a documented brain injury.
Guided Credible History Revision to Oregon Administrative Rules
Credible History

In the case that medical documentation either cannot be obtained or when the individual did not seek medical attention, the following elements will help school personnel to establish a credible history of TBI.
Total TBI Identified in USA 14,102 (2013 data)
Accurately identified in USA: 32%
Average correctly identified by state: 19-75%
Why do we need this? Examples.

Requiring medical documentation of TBI for students to be eligible for special education services can be a significant barrier to effective identification and service delivery.

(Dettmer, Ettel, Glang, & McAvoy, 2014)
Survey of Stakeholders
Have you ever experienced difficulty obtaining medical statement?

- Yes: 84%
- No: 14%
- NA: 2%

67 Responses
Have you ever experienced difficulty obtaining medical statement?

59 Responses

- Yes: 93%
- No: 5%
- NA: 2%

School Psychologist Data
Eligible for special education under Traumatic Brain Injury

MEDICAL DOCUMENTATION of a traumatic brain injury

A SIGNIFICANT HISTORY of one or more traumatic brain injuries reported by a reliable and credible source and/or corroborated by numerous reporters

OR

EDUCATIONAL IMPACT
What are Oregon’s IEP Numbers Before and After Implementing the Credible History Process?

<table>
<thead>
<tr>
<th>Before Credible History</th>
<th>After Credible History</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>260</strong> identified students 3-21yo eligible for TBI services under IDEA out of the <strong>5200</strong> that should need services.</td>
<td><strong>312</strong> students 3-12 were identified as eligible for TBI services</td>
</tr>
<tr>
<td><strong>5%</strong> of the students who should need assistance.</td>
<td><strong>14</strong>-Early ed <strong>298</strong>-school age</td>
</tr>
</tbody>
</table>
How does it all fit together?
Most students enter here.

Sustained impact students enter here.

Severe students enter here.

ITAP (most students)

504 (a few students)

IEP (very few students)
Educator Readiness
Teacher Training in TBI survey of educators

N = 352
Special educators (62%)
general educators (38%)
75% had master’s degree

Ettel, Glang, Todis, & Davies, 2016
School Psychologist Training in TBI

• Survey (N= 232)
• 88% had worked with student with TBI
• 78% held masters degree or higher

Glang, McCart, Moore & Davies (2016)
Percent of School Psychologists with prior TBI training

- 43% with prior TBI training
- 57% with no training
School Psychologists rated themselves...

- 48% were qualified to differentiate between students with TBI and students with other disabilities
- 47% were able to provide a school with information about TBI
- 27% felt comfortable serving as an IEP case manager
For years at least 34 years we have been documenting the need for educator training.

New struggles are emerging...
- lack of release time
- lack of finances
- lack of time
Professional Development/Training
Concussion in the Classroom: Best Practices for Student Success

In the Classroom after Concussion:
Best Practices for Student Success

Total course time: 10 hours (10 PDU’s). Work at your own pace, on your own schedule.

What Will I Learn?

- How brain injury differs from other disabilities
- How to create a classroom that supports student success
Concussion in the Classroom: Best Practices for Student Success

• Target: What’s different about TBI?
• Topics identified by educators
• Focused on classroom teachers
Positive student outcomes

Awareness

Knowledge

Applied Skills
Content Development

- Literature on evidence-based strategies
- LearNet content
- Interviews with educators

Partnership: CO, OH, OR, PA, AL state representatives

Ongoing input from Educator Advisory Panel and consultants
Instructional Design

- Information: text, video testimonials
- Resources: printable forms, links, case studies
- Skills training: interactive video
# Home Page Topic Options

### Return to School
- How Is Brain Injury Different from Other Disabilities?
- Return to School After Concussion

### Screening and Services

### Accommodations and Modifications

### Classroom Strategies

### Promoting Social Interactions

### Behavioral

### Transition

### Parental Communication

### Resources
RCT Evaluation

Randomized controlled trial
N = 100 classroom teachers (Oregon/Ohio)
Randomly assigned to either In the Classroom (Intervention) or LEARNet (Control)
5 hours total content
Evergreen Evaluation

Quasi experimental study

N=81

All online without supervision

(real world application)
Outcome Measures-RCT and Quasi Experimental

- Knowledge-SS results
- Skill application-SS results
- Self-efficacy-SS results
Returntoschool.org
Learn.cbirt.org
Health Care to School Transition and Collaboration
Medical to School Professional Transition

The Problem:

There is no “well-prepared and coordinated medical and school system in place, nor is there a framework for the immediate adoption of such a system.”

J Child Neurol. 2016 Jan; 31(1) 93-108
Communication Breakdown

No link from hospital/medical care-school

• The parents usually bear the responsibility to educate school personnel about the effects of injury and disability

Lack of communication within school system

• Grade to grade, teacher to teacher, school to school
Two Different Systems

Example: OT at school/OT at a care provider

• Care provider...Open more broadly

• School...Only available if the child has an IEP and the condition requires specially designed instruction.

• Communication is limited.
The transition from hospital to school-regarded as a key factor in the educational success. Interesting Findings...


• $N=21$

Two themes:

1. provision of hospital-school transition services is inconsistent and

2. teachers lack sufficient awareness of and training in TBI to implement hospital transition recommendations. Regardless of the type and quality of transition support, most educators in the students’ schools remained unaware of the students’ needs and how to meet them.
Critical needs in merging the best medical practices with the best academic practices

1. We need REGULAR, ON-GOING COMMUNICATION between the medical provider, the family and the school; and,

2. We need a defined school mTBI Team that is skilled in TRANSLATING the student symptom profile into academic supports and accommodations.
Standard practices and forms can provide consistency in the application of the accommodations.
Release of Information – Multiple providers

• Sports Concussion Clinic
• Behavioral Health
• Neurology
• Concussion Clinic
• TBI Team

Authorization to Use and/or Disclose Educational and Protected Health Information

1. I authorize the following providers to use and/or disclose educational and/or protected health information regarding my child.

   Student/Child’s Name: ________________________________
   Date of Birth: ________________________________
   Other Names Used by Student/Child: ________________________________
   School or Program Name: ________________________________

   Name and address of health care provider authorized to:

   □ Send/disclose protected health information
   □ Received/use educational information

   Sports Concussion Clinic (Michael Koester, MD and Ryan Watson-Stites, PhD)
   Slocum Center for Orthopedics and Sports Medicine
   55 Coburg Road, Eugene, OR 97401
   Phone: (541) 485-8111
   Fax: (541) 342-6379

   Strong Integrated Behavioral Health (Karyn Angel, PhD)
   66 Club Rd. #120, Eugene, OR 97401
   Phone: (541) 393-5983
   Fax: (541) 393-5984

   Oregon Neurology Associates (Jeffrey Frank, MD)
   3355 Riverbend Dr. #410, Springfield, OR 97477
   Phone: (541) 868-9430
   Fax: (541) 868-9450

   Brain Injury and Concussion Clinic (BrICC)
   HEDCO Clinic University of Oregon Campus
   1655 Alder Street (17th & Alder)
   HEDCO Education Building, Suite 170
   Phone: (541) 346-0923
   Email: ledette@uoregon.edu

   Center on Brain Injury Research and Training (TBI Team)
   1600 Millrace Drive, Suite 202
   Eugene, OR 97403
   Phone: (541) 346-0593
   Email: mcart@uoregon.edu

   Other: ____________________________________________
   ____________________________________________
   ____________________________________________

   Name and address of school/EI/ECSE program authorized to:

   □ Send/disclose educational information
   □ Received/use protected health information
Accommodations available in the Classroom

Educator Survey Data

Dr. Gioia identifies “key themes” of well-prepared and coordinated medical and school systems:

- **“All medical providers and key school personnel should be TRAINED for their SPECIFIC ROLE in the support of the student with mTBI, with a focus on manifestations in the school setting.”**
- **“A school mTBI team must be defined, skilled in TRANSLATING the student symptom profile into academic supports / accommodations.”**
- **“Regular, on-going COMMUNICATION occurs between the family, medical provider, student and school regarding the student’s symptom status and progress.”**
Best Practices are defined by evidence-based research

Standard forms will provide consistency in the application of the accommodations.

Integration of the Immediate Temporary Accommodations Plan (ITAP) or Concussion Accommodations Plan (CAP), are necessary to ensure that the accommodations are initiated immediately after the school is informed of the student’s mTBI.
More Research


Welcome to learn.cbirt.org
the online resource portal for the Center on Brain Injury Research and Training

If you are currently working through a CBIRT course, you can continue your progress here.

In the Classroom after Concussion: College
What college faculty need to know about brain injury

Open access - no account needed

This is a 1-module, online course that provides information about the academic impacts of concussion in college students, what academic and environmental accommodations can help, and the role college faculty play in supporting college students with brain injury.

View course
CBIRTonline
uoregon.zoom.us/webinar/register/ WN_sxC9Bnr4TrGblszQmK M4nQ

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CBIRT | Center on Brain Injury Research and Training, University of Oregon
Dedicated to research and training to improve the lives of children and adults with traumatic brain injury.
Research · Eugene, Oregon · 58 followers
Ann & 4 other connections work here · 6 employees

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