

CONCUSSIONS

What physicians
need to know now

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Registration is now open for the
NMA's 2017 Annual Membership Meeting,
September 8 in Lincoln!

Visit www.nmaevents.org



President's Message

by Todd Pankratz, MD
NMA President

Spring has come and gone and with the arrival of summer comes change. Over the winter months your Board of Directors and NMA staff has been busy undergoing a branding change to solidify the brand image of the Nebraska Medical Association and the physicians of Nebraska.

As you can see on the cover of this issue of the NMA's magazine, we have renamed our publication *The NMA Advocate*. We are excited about this change and feel that *The NMA Advocate* better describes how the NMA serves the physicians of Nebraska at both the local and national levels. In addition to advocacy, we do our best to try to positively influence and shape the practice of medicine and the daily lives of the physicians who have made the decision to support their membership organization.

Over the years we've covered a range of topics in our publication including opioids, member hobbies, minority health, child health, advocacy efforts, the medical home, electronic health records, adoption, organ donation, men's health, women's health and much, much more. We hope that you've found these issues of value as you approach your daily care of patients, and we anticipate *The NMA Advocate* serving and educating members for many years to come.

You might also notice our logo has received a fresh look. These changes demonstrate the NMA's commitment to the future, while also appreciating the past and the members and leadership before us that worked diligently to make the NMA the preeminent organized medicine organization in the state. We take this position seriously and look forward to continuing our efforts into the future.



Lastly, this summer we will unveil a new website that we hope will provide even more value to our membership as well as educate non-members on the value and importance of membership in the NMA. This has been a large undertaking, but one we felt was critical as we lead in ever changing times.

As Advocates for Physicians and the Health of all Nebraskans, it has been an honor to represent you over this past year as President of the association. You have a truly dedicated Board of Directors and staff committed to ensuring the best for the practice of medicine and patient care in the state of Nebraska. However, we cannot accomplish our goals without an active and engaged membership that is inclusive of all specialties, all ages, all political affiliations and all geographic locations.

As always, please feel free to contact us with ideas and suggestions on how we can better serve you as members.



Executive Vice President's Message



by Dale Mahlman
NMA Executive Vice President

As previously mentioned by Dr. Pankratz, you should have noticed that this edition of your quarterly Nebraska Medical Association publication features a new name and look. As we approach our 150th anniversary in 2018, your Board of Directors and staff decided to rename our publication *The NMA Advocate*, and we are now proud to feature a revision of our logo.

In a world of constant change and instant identification, our team, led by our Communications Director Carole Bates, has been researching and reviewing our next generation of “branding” tools over the past six months. Carole has been working closely with Lincoln-based Unanimous, our chosen partner on our website redesign, logo redesign and publication renaming. The publication renaming became necessary as a result of our friends in Omaha utilizing the Nebraska Medicine name. As you know, Nebraska Medicine is the clinical partner of the College of Medicine. However, because we like to focus on the positive we saw this as a perfect opportunity to refresh and modernize our look to reflect the NMA's relevance in today's world. We are quite pleased with the revisions, and we hope you will identify with them for many years to come.

In 2017, the NMA staff continues to promote the value of membership with a broad array of services available. The last edition of our magazine highlighted the member services available through our newly formed Nebraska Medical Association Insurance Group.

We had a busy session in the Legislature and several NMA bills were passed. We hope that you read your weekly STAT email that highlighted bills we tracked this session; watch for your end-of-year recap to arrive in the mail.

We continue to provide management support to our 12 specialty society clients in the state, with our Specialty Society Director Sarah Dunbar staying very active through a busy spring meeting season organizing and coordinating their membership and legislative efforts. We value these relationships and take this service to membership very seriously.

Our legislative efforts under the watchful eye of Vice President of Advocacy and Regulation Jina Ragland and our lobbyists at Mueller Robak (Kim Robak and Matt Schaefer) had a fun time (meaning hands full) with a new group of senators this session and the returning senators who have made this session one of the most interesting in recent times. Remember from the last EVP column, it took 49 days of a 90-day session to adopt the rules. Jina, Kim, Matt and, when they need a “closer,” me, continue to advocate the legislative agenda of your association and expect the best of outcomes while bracing ourselves for the bumpy road along the way.

As with any membership organization, if members don't see the value in maintaining their membership, none of the above would be possible. Led by our Membership and Education Director Meghan Johnson we once again in 2017 have exceeded our membership goal, and we thank each and every one of you for your continued support of the NMA.

Lastly, this year's 2017 Annual Membership Meeting planning is almost complete, and we hope all of you take a long look at the programming and attend the September 8 event in Lincoln. This year we are focusing on Physician Leadership and there is no better time to learn about the importance of engaging by hearing the message of Lieutenant General Mark Hertling, a subject matter expert now working for the innovative Florida Hospital in Orlando. We hope you all have the time and interest to spend the day with us; we certainly have the interest in hosting you. □

Educational Collaboratives: Changing the Culture of Concussion

By Peggy Reisher, MSW

Executive Director, Brain Injury Alliance of Nebraska

Twenty years ago, advocates wanted brain injury to become a household term.

We dreamed that one day everyone would be aware of the risks and consequences and take the necessary actions to protect their brains.

We dreamed the federal government would invest millions of dollars to understand how our brains work.

We dreamed researchers would develop treatments to stop cell death and clinicians would create new neural pathways to help us learn again.

We dreamed schools would be attentive to the child struggling in the classroom because he or she couldn't process the information as he or she did before the brain injury.

We didn't dream these dreams would come true because of mild brain injury also known as a concussion.

But the reality is, injuries sustained by service members and athletes of all ages and abilities have generated more awareness, prevention, and research than we had 20 years ago. We now know more about how to minimize brain injury's physical, cognitive, and behavioral challenges – or at least how to accommodate for them.

Many of the advances in the brain injury community can be attributed to the "concussion craze." And although we are thankful for the advances this craze has brought, concussion is still misunderstood, and there is a need for education so concussions are properly recognized and managed.

A Harris Poll completed in April 2016 on behalf of University of Pittsburgh Schools of Health Sciences (UPMC), revealed:

- **A fear of concussions may be impacting parents' decisions to let their kids play contact sports**
 - 9 in 10 (89%) adults believe concussions are a moderate to severe health concern
 - About 1 in 3 (32%) of parents live in fear that their child will get a concussion

- 1 in 4 (25%) of parents do not let their kids play some contact sports because of fear of concussion
- 2 in 5 (41%) adults feel that getting a concussion is a "living nightmare"
- **Many Americans (57%) have personal experience with concussions**
 - About 1 in 4 (26%) adults did not see a health care professional when someone in their family had one
- **The vast majority of adults can't correctly define a concussion**
 - Roughly 9 in 10 (87%) Americans do not know the definition of a concussion
 - 2 in 5 (37%) adults admit that they are confused about what a concussion truly is
- **There are varying degrees of knowledge when it comes to understanding the symptoms of concussion**
 - Slightly fewer than 3 in 5 adults can correctly identify immediate symptoms of a concussion: headache (58%), dizziness/motion sensitivity (58%), and cognitive difficulty (55%)
 - Far fewer—roughly 1 in 3 or less—understand that the following also are symptoms: fatigue (34%) and changes in mood (13%)
- **The majority of Americans do not realize that concussions are treatable**
 - Barely 1 in 4 (29%) of Americans believe that all concussions can be treated
 - 79 percent of adults incorrectly believe or are unsure that there is no real way to cure a concussion; the symptoms can only be lessened
 - About 4 in 5 (81%) Americans aren't comfortable that they would know the steps to manage or treat a concussion if they sustained one
- **The majority of Americans (83%) feel that major progress has been made in the past 10 years in assessing and treating concussions**



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Brain Injury: A Personal Journey



By Peyton Brockman
Brain Injury Survivor
& Cathy A. Wyatt
Community Outreach Director | Brain Injury
Alliance of Nebraska

“My name is Peyton Brockman... And, I am a brain injury survivor.”

That is the final line of a video called ‘Concussions: Then & Now.’ It features the now 19 year old Omaha native.

“I started playing soccer at the age of five,” said Peyton. “I was so in love with the game that I invested 10 years of my life in it.”

And, she was good; aspiring to one day become a professional athlete. But, it wasn’t to be.

Peyton sustained not one but three concussions; a series of head injuries that started in the 8th grade. The first two occurred after she headed the ball and collided with another player. The third happened when she collided with another player in the air. She landed on the back of her neck, fracturing the C-7 vertebrae.

“I’m sure the doctor said a lot of things to me during that visit,” said Peyton; “however, the thing I will never forget was when he told me that I would have to stop playing soccer.”

What had consumed more than half of her life was now over. And if the news itself weren’t bad enough, she had to face it while experiencing signs and symptoms that would rock the world of the most stable person.

“I had trouble seeing,” said Peyton. “I couldn’t concentrate. I had constant headaches... I could barely function at home, let alone go back to school. When I finally did, I became extremely frustrated because I couldn’t stay engaged the whole day without becoming agitated with or overwhelmed by all the people.”

Peyton did say that the teachers and coaches were amazing, attributing much of their reaction to a true sense of commitment to the student population and their knowledge of the Nebraska Concussion Awareness Act.

“They stayed after school and believed in me even when I didn’t believe in myself,” said Peyton.

“I wanted to give up,” she said. “But they wouldn’t let me.”

Which meant that Peyton had to do what so many individuals who have had a brain injury are forced to do: reinvent themselves.

“I didn’t really know what that meant,” she admitted. “I guess I was in denial. Despite what everyone kept telling me, I thought I would wake up one day and the nightmare would be over. I’d be out with my friends doing the only thing I knew how to do: play soccer.”

But every morning brought the same sobering reminder: Peyton was different. And, no matter how hard she wished for things to go back the way they were, they wouldn’t.

“My mom was my biggest supporter,” said Peyton. “I am not here without her.”

Although Peyton admitted that she didn’t always feel that way about her mom or about any of the people who were on the ‘decision-making team.’

“You get mad. You get really mad,” said Peyton. “Your judgement is clouded. All you want is the short-term win. It took those who really cared about me to see that the value in the long-term and all the exciting things waiting for me on the horizon.”

A lesson Peyton said came from understanding that returning to learn was much more important than returning to play.

“Soccer was a major part of my life, but it wasn’t all there was,” she said. “Okay, so that’s a little bit easier for me to say now because I know how this part of my story ends.”

She graduated from Westside High School in May of 2016 and is currently working at Nebraska Medicine as a pharmacy technician.

“I’ve been working there since last September and love it,” said Peyton. “I am learning so much every day and expanding my knowledge of the healthcare profession.”

An education that goes both ways.

Thanks to Peyton, the healthcare profession is learning so much every day and expanding its knowledge of brain injuries, especially concussions, and what it means - truly means - to survive. □

Concussion Recognition & Management: Training Modules

*By Kody Moffatt, MD, MS, FAAP, FACSM
Director of Pediatric Sports Medicine
Children's Hospital & Medical Center*

Concussion Education for the healthcare provider has evolved as research is shedding new light on best practices. These concussion education modules were created for Nebraska licensed healthcare professionals, as a comprehensive overview and guide for evidenced based concussion recognition and management. They progress through the legality, epidemiology, signs and symptoms and ultimate diagnosis and management of concussions.

Failure to recognize and properly manage a concussion can lead to an injury known as “second impact syndrome.” Second impact syndrome can cause a lifetime of disability or can be even fatal.

Signs of a concussion can often be minimal, as this is a functional injury of the brain. Identification and recognition comes from the report of the patient's symptoms and are often subtle. The core to concussion management is deciphering where they are experiencing deficits as they navigate their daily physical, emotional, cognitive and sleep tasks. Duration, type, and number of symptoms are all important for proper assessment and diagnosis of concussion. Management decisions should be based on an assessment that involves not only the subjective report of the patient, but also the results of objective tests and measures. There are several tools that can be helpful in determining the extent of the recovery process. These measures are used only as tools and their results are used in combination with the subjective data from the patient. This helps to ensure a clearer picture of the potential risk of increased activity. A subset of mild TBI patients experience prolonged symptoms and a delayed recovery. These individuals must be managed differently as their symptoms change and resolve. School and work accommodations may need to be instituted for optimal functioning and recovery. It's critical to determine the proper learning and physical activity progressions for each patient, as this can vary greatly between individuals.

New research is supporting a paradigm shift in the treatment of concussions. The practice of “cocooning” the concussion patient, to minimize external stimuli for full brain rest, has been shown less effective than other treatment options. This approach can actually emphasize the isolation of the patient, restrict important socialization environments and contribute to emotional anxiety. There is a difference between sending a text or watching TV and studying complex math and science problems. Understanding the nature of the patient's deficits, their emotional and physical needs and the role these play in their life cannot be underestimated. The ultimate success of treatment and management is to implement a structured return to learn and return to play program that works for each individual. Finding a path to normalcy in their life must involve engagement in what is normal to them, while avoiding true symptom triggers.

These six modules qualify for Continuing Medical Education credit, American Academy of Family Physicians (AAFP) credit and are offered by Children's Hospital & Medical Center. The content of each module varies by specific topic.

Module 1: Nebraska became the 13th state to pass the Concussion Awareness Act. It states that education must be provided to parents and coaches on an annual basis in regards to brain injury with youth sports and how it impacts education and performance. The act states the “minimum” measures that must be done and provided for a child who endures a brain injury. Removal from play involves removal, notification and resumption of activities when deemed appropriate after a concussion. The Act now incorporates a “Return to Learn” component to aid with the learning environment/classroom.

Module 2: Loss of consciousness is not a necessary factor to diagnose a concussion, which affects the strategy to which those detect and protect athletes. A mild TBI typically involves loss of consciousness for 0 to 30 minutes,

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Concussion Recognition & Management: Training Modules

(continued)

a moderate TBI between 30 minutes and 24 hours and a severe TBI more than 24 hours. Statistically, sports are second to motor vehicle accidents for causes of brain injuries for those aged 15 to 24. If a concussion is not addressed and an athlete or individual returns to activity too soon, they are at risk of Second Impact Syndrome which may lead to brain edema and increased intracranial pressure. Additionally, PCS (Post-concussive symptoms) can last for up to a year after the incident.

Module 3: After a trauma the signs of a concussion may include (but not always) headache, fatigue, dizziness, sensitivity to light or noise, nausea, balance difficulties, unusual irritability, mood changes, difficulty with concentration, difficulty falling asleep, sleeping excessively, and more depending on what the individual presents. The ACE Care Plan is a resource toolkit that manages the progression of a concussion and when it is safe to return to activity. It is important to use objective as well as subjective methods in diagnosing and monitoring a concussion as no two individuals or episodes are the same.

Module 4: When first diagnosing a concussion, it is important that a provider completes a brief neurologic assessment including a vision assessment, coordination, neck pain, balance and a brief cognitive assessment. It is also important to conduct a thorough neurological exam if necessary to observe for structural damages or other red flags that may otherwise go undetected from a traditional exam. Some other assessments include; the SCAT3, Graded Symptom Inventory, the Bess, Modified Romberg, Cranial Nerve Assessment, ImPACT, ANAM, Cogstate, among others.

Module 5: The best outcomes of rest are seen when they are done early on in the first two days after the event, and not to exceed more than five days. It is also known

that early activity enhances their outcome and prognosis. It is also recommended that individuals avoid taking over the counter medications as well as other drugs and alcohol after a concussion, along with driving, climbing, lifting weights and other activities that may worsen symptoms and increase the likelihood of a second concussion. Furthermore, the Return to Learn progression is gradual and involves a daily observation of the student and accommodations to be made in the classroom as deemed necessary. Although this was an amendment to the ACT, it serves as the most important in terms of students reintegrating back into activity and their role as a student over their role as an athlete. The 504 and IEP legislation also allow for long-term accommodations for the students if needed.

Module 6: Some of the predictors of delayed recovery after a concussion include history of previous concussion, loss of consciousness for over a minute, history of anxiety/mood disorders, history of learning disorder, severity of TBI, history of migraines/headaches and history of personality disorders. Beyond the physical symptoms, it is important to provide and monitor for other factors that may have been impacted after a concussion including emotional disturbances, social distress, anxiety, sleep disturbances, self-esteem and others to recommend the necessary specialists such as PT, OT, SPT, social workers, counselors, neuropsychologists, among others to best reintegrate that individual back into their life roles and occupations.

The authors of these modules designed them with the goal of providing current, useful, practical clinical information in an easily accessed format and respectful of the user's time.

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The Nebraska Concussion Awareness Act: Why do we have it and what does it mean to healthcare providers?

By Lori Terryberry-Spohr, PhD, ABPP

Director of Rehabilitation Programs

Madonna Rehabilitation Hospitals

Concussions, or mild traumatic brain injuries (mTBI), impact millions of Americans annually. Over the last approximately 10 years, increasing attention to the potential seriousness of these injuries has resulted in unprecedented litigation, regulation and legislative activities both in Nebraska and across the nation. This article will summarize why this legislation exists, what the legislation includes and the role you play as a healthcare provider.

The state of Washington enacted the first comprehensive concussion legislation in 2009. The legislation, referred to as the Zachary Lystedt Law, was named for a 13 year old middle school football player who collapsed with a traumatic brain injury after he was allowed to return to a game just 15 minutes after suffering a concussion. After returning to the game, Zachary collapsed into a coma for nine months and remains in a wheelchair to this day, having regained the ability to speak but with a number of serious impairments. Many believed that Zachary was another example of Second Impact Syndrome (SIS), a rare but catastrophic condition where an athlete suffers a first concussion and while still symptomatic, returns to play and sustains a second head injury, resulting in diffuse cerebral swelling, brain herniation and in over 50% of cases, death. SIS has been a subject of debate since the condition is rare, complicating large scale research, and oftentimes the first concussion in question is undocumented, making the retrospective nature of the diagnosis contentious. Nevertheless, a study of high school and college football players over a 13 year period demonstrated 94 catastrophic head injuries (defined as significant intracranial bleeding or edema) during that time period, most of which had a previously known or identified concussive injury. Of note, only two of those athletes were college aged, supporting the belief that SIS

is a disorder that only occurs in the developing brain. Although it remains unclear whether SIS is definitively related to multiple concussions in close proximity or whether there may be some other variable that makes certain youth more susceptible, there is agreement that it is worth trying to prevent these types of catastrophic outcomes.

The second major contributor to the rapid development and implementation of concussion legislation is literature supporting the possibility of the long-term effects of multiple concussions. In 2009, a study sponsored by the National Football League (NFL) stated that retired professional football players between the ages of 30 and 49 were 20 times more likely than their non-playing peers to develop dementia type diagnoses. Furthermore, players above the age of 50 showed a rate of dementia diagnosis five times higher than the national average of 1.2%. Retired professional athletes in collision sports also appear to be demonstrating higher rates of depression and suicidality. These types of studies, combined with a number of well known professional athletes including Troy Aikman, Steve Young, and Eric Lindros retiring due to concussions, brought considerable headline attention to the issue.

Finally, considerable research was being published that indicated that concussion recovery is a process that in youth typically occurs over several days to a few weeks rather than a few hours to days as many had previously thought. In addition research indicated that the recovery was highly individualized, based on a number of personal factors and contributors including previous history of concussion, learning disorders, socioemotional issues, history of headaches, etc. During this recovery period, evidence indicated that there were subtle changes in balance, reaction time, and cognition that could lead to a greater risk for re-injury and therefore monitoring by a healthcare professional was important to prevent return too soon.

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The Nebraska Concussion Awareness Act: Why do we have it and what does it mean to healthcare providers? (continued)

Although the current recommendations on concussion management largely represent consensus regarding conservative practices to protect youth rather than large scale research which has yet to be completed on exactly what promotes the most rapid recovery, the recommendations are widely supported by a number of international healthcare provider organizations. Many of those organizations have supported and advocated for legislation to protect youth from repetitive concussions and the potential long-term effects of these injuries. Without legislation, it could potentially take 10 years or more for consistent implementation of these practices so legislation became the way to move forward with protecting youth on a consistent and widespread basis, knowing that the literature could evolve and practice recommendations could change as a larger evidence base developed.

Following the implementation of Washington's law, all 50 states and the District of Columbia have passed concussion legislation with the state of Mississippi being the final state in 2014. The Nebraska Concussion Awareness Act, passed by the Nebraska legislature in 2011 and implemented on July 1, 2012, focuses on three primary areas: Education, Removal from Play and Return to Play.

Education: Coaches' education must be readily available and athletes and parents must be provided concussion information prior to participation on an annual basis including signs and symptoms, risks, and actions to take if a concussion occurs.

Removal from Play: Any athlete "reasonably suspected" of having sustained a concussion must be removed from participation and may not return until evaluated by an appropriate licensed healthcare professional.

Written and Signed Clearance for Return to Play: Before returning to play after being "reasonably suspected" of having sustained a concussion, an athlete must receive written and signed clearance from an appropriate licensed healthcare professional and from the athlete's parents.

In 2014, an addendum was passed that incorporated Return to Learn.

Return to Learn: Requires schools to have in place a protocol for assisting students recovering from a concussion to return to school including informal or formal accommodations, modifications of curriculum and monitoring by staff (teachers, school nurses, etc.) until the student is fully recovered.

An important note about Nebraska's legislation is that it was the first state to cover athletes not only in school related sporting activities but it also applies to "any city, village, business, or nonprofit organization sponsoring a sport activity and having athletes 19 years old or younger, where there is a cost to participants or where such costs are sponsored" so this legislation also applies to those in club sports, select teams, parks and recreation programs, etc.

COMMON QUESTIONS:

Who qualifies as an appropriate licensed healthcare professional? In Nebraska, that means a physician or licensed practitioner under the direct supervision of a physician (PA-C or APRN), an athletic trainer (ATC), a neuropsychologist, or a qualified individual able to provide health care services under one's scope of practice in Nebraska. All individuals who provide clearance, in addition to being licensed and practicing within one's scope, must also be trained in the evaluation and management of traumatic brain injury among a pediatric population.

If my training is not recent or management of concussion was not a part of my healthcare provider curriculum, where can I receive training? The Nebraska Concussion Coalition, the Nebraska Department of Health and Human Services' Injury Prevention Program and medical professionals with expertise in concussion worked collaboratively to develop a series of six free online training modules available for CME credits. These modules are designed to be efficient and concise while providing the necessary information for you to know how to assess and manage a concussion. They are described in further depth in the article on page 7 of this publication and can be found at the following address:

<http://dhhs.ne.gov/publichealth/ConcussionManagement/cr00.aspx>

Concussion Recognition: An Art & A Science

*By Rusty McKune, MS, ATC
Sports Medicine Program Coordinator
Nebraska Medicine*

While many agree with the statement that we have learned as much about concussions in the past five years as we did in the previous 50, the clinical assessment and diagnosis of concussion continues to be described by some to be as much an art as it is a science (NE DHHS, Concussion Recognition and Management, Module 4, 2015). Currently, there is not a specific test to definitively diagnose a concussion. Therefore, healthcare professionals must use their clinical experience to interpret findings from their evaluation as they seek to diagnose a condition which can vary greatly between patients and even within the same patient (NATA, 2014). Given that our ability to properly manage this injury relies upon our ability to first recognize and then diagnose the injury, it is imperative that healthcare professionals familiarize themselves with the evidence and utilize the appropriate clinical tools to accurately identify this injury.

Many of the recent findings on concussion have come on the heels of highly publicized events within athletic arenas such as the NFL, the NCAA and high schools. Many of the major sports medicine groups and organizations (AMSSM, AAN, NATA, Zurich) have released position and consensus statements about the proper management of the concussion as they relate to sports. More recently, these have incorporated how this management relates to the academic performance of students who sustain concussions, including those sustained outside of a formal athletic venue. While the management of the injury continues to evolve and is the focus of a great deal of research, it remains reliant upon the ability to properly recognize and diagnose the injury. It is the process of recognition that will be the focus of this article.

The immediate recognition of this injury within athletics is facilitated at some levels by the presence of healthcare professionals such as physicians and certified athletic trainers. In this environment, the immediate concern is recognizing the possibility of the injury so that the athlete

can be removed from play and a more thorough evaluation may be performed. The obvious concern is the potential for prolonged recovery or even catastrophic outcome (second impact syndrome) that can result from successive injuries before the complete resolution of the initial injury.

The reality remains that many of the concussions sustained during athletic activities and most concussions incurred outside of athletics go unrecognized and undetected until the patient is seen in a more formal setting such as an emergency department or office, hours sometimes days later. Regardless of where the evaluation occurs, there are components of an evaluation that should remain consistent. This should include the assessment of the mechanism of the injury, the signs and symptoms, neurologic status, and balance, cognition and vision testing. Whenever possible, the results should be compared to a baseline which represents the patient's status in an uninjured state. There are tools available to assist healthcare professionals in their evaluation of this injury on the sideline or in the office which include: the Sport Concussion Assessment Tool- 3rd Edition (SCAT3), Standardized Assessment of Concussion (SAC), the Acute Concussion Evaluation (ACE) (IOM, 2013; BJSM, 2013) and the Graded Symptom Checklist (IOM, 2013; BJSM, 2013; NE DHHS, 2015).

In the 2014 publication "Sports-Related Concussions in Youth: Improving the Science, Changing the Culture," the Institute of Medicine points out that "given the absence of diagnostic test or biomarker for concussion, the current cornerstone of concussion diagnosis is confirming the presence of a constellation of signs and symptoms after the individual has experienced a hit to the head or body" (IOM, 2013 p. 90). Identifying the presence of these signs and symptoms of concussion is the first step to recognizing the injury and is the result of a thorough and complete history which can then be combined with tests which provide objective findings relative to the neurologic and cognitive status of the patient.



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Concussion Recognition: An Art & A Science (continued)

History - Examples of questions to include during the evaluation (CDC, 2006; BJSM, 2013; NE DHHS, 2015)

- How did the injury happen? From a traumatic event?
- When did the injury happen?
- Has there been a previous injury? And, if so, when?
- Was there a loss of consciousness?
- Was there a loss of memory (of events prior to, or following the injury)?
- Were or are there any neurologic symptoms present?
- Is there a history of headaches?
- Is there a history of learning disabilities, ADD/ADHD, or psychiatric conditions?
- What signs and symptoms are present?

Signs (What is observed) and Symptoms (Subjective report based on what the athlete reports) of Concussion (IOM, 2013 p. 92; DHHS, 2016 Module 2)

COMMON SYMPTOMS OF CONCUSSION	COMMON SIGNS OF CONCUSSION
<ul style="list-style-type: none"> • Physical Symptoms <ul style="list-style-type: none"> - Headache - Nausea - Visual Problems (blurred, double) - Dizziness - Balance Problems - Sensitivity to Light or Noise - Fatigue • Emotional Symptoms <ul style="list-style-type: none"> - Irritability - Sadness - Feeling More Emotional - Nervousness • Cognitive Symptoms <ul style="list-style-type: none"> - Difficulty Remembering - Difficulty Concentrating - Feeling Slowed Down - Feeling Like They Are in a Fog - Feeling Confused • Sleep Symptoms <ul style="list-style-type: none"> - Sleeping More or Less Than Usual - Trouble Falling Asleep 	<ul style="list-style-type: none"> • Vacant Stare • Slow to Answer Questions/Follow Instructions • Disoriented • Slowed Speech • Memory Difficulties • Gross Incoordination • Emotions Out of Proportion for Situation • Loss of Consciousness

Balance and Cognition

As previously stated, there are several tools that are available to help with the recognition and assessment of a concussion. The SCAT3 incorporates several tools useful in determining if there are issues with cognition (the SAC), balance (Modified BESS) and coordination. The SAC is a designed to help alert the healthcare professional of potential issues related with cognition. In addition to these, there are other tests that are designed to specifically address neurocognitive deficits, neurologic status, visual and vestibular deficits, but which are beyond the scope of this discussion.

Conclusion

The proper management of a concussion is always preceded by the recognition of the injury. Failure to recognize the injury can lead to a number of deleterious outcomes ranging from a protracted recovery to catastrophic injury. Concussion is an injury that is often described as a functional disturbance rather than a structural injury. As such, the initial recognition of the injury may be based as much on what is learned from the patient as what is seen before or during the assessment. Given the ramifications of an improperly diagnosed or mismanaged injury, it is imperative that the healthcare professionals familiarize themselves and with the tools and resources needed to properly manage the injury from the initial evaluation through recovery.

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Concussion Management: It Takes a Village

*By Michael Weaver, DO, MS, FAAPM&R, CAQSM
Program Director, Physical Medicine & Rehabilitation
UNMC*

Traumatic brain injury (TBI) is a serious condition which can significantly affect one's ability to function meaningfully in today's society. Severity of injury can range from a concussion to a severe TBI with diffuse axonal injury (DAI). Regardless of which end of the spectrum an individual might be affected, if they are not provided the appropriate means for treatment, they may face persistent cognitive and functional deficits for a prolonged period. The CDC² acknowledges the health effects associated with a TBI may include cognitive, behavioral/emotional, motor, sensory or somatic signs and symptoms. Management of a TBI has continued to adapt as new treatment options, including therapies and pharmacological means, continue to be developed. However, there has always been a foundation firmly rooted in a comprehensive approach individualized to the patient's needs. Subsequently, it is imperative to have a multidisciplinary team involved in the care of these patients, each with separate roles but all aimed at returning the patient to their prior level of function whenever possible.

Depending upon the injury and issues a patient faces, some or all members from various therapeutic disciplines may be involved in their treatment plan. Aside the physician, I would argue the more valuable members of the team includes physical therapists, occupational therapists, speech language pathologists, recreational therapists, certified athletic trainers (ATC), neuropsychologists, nurses, family, school/vocational counselors, teachers and coaches. Each individual from these categories plays an important role in the management of a patient with a TBI. Physical therapists assist in optimizing functional mobility, balance, strength, flexibility, endurance, coordination and may incorporate vestibular therapies depending upon a patient's need. Interventions to assist in improving activities of daily living (ADLs) will be provided by occupational therapists, and many will incorporate vision therapies as these are common deficits seen in TBI. Speech therapists are important to evaluate both cognitive and

communication abilities following a TBI and can enhance higher level executive functioning. Recreational therapists assist in focusing on leisure activities enjoyed by patients and improve their social functioning by including sport, music, art and humor. ATCs and coaches are particularly important when dealing with athletes who have sustained a concussion and provide assistance when monitoring these patients as they return to sport. Similarly, teachers and guidance counselors are invaluable when assisting the primary focus in this patient population with modifications allowing them to return to school. Neuropsychologists are able to conduct formal testing modalities to assess underlying behavioral and cognitive deficits, identifying specific areas which need to be focused on during the comprehensive treatment plan. Finally, perhaps most importantly, is the family support system which is in place for those affected with TBI. They are providing daily care and emotional support for these patients and give valuable insight on the day to day progression of symptoms.

Similar to most traumatic injuries or neurological based diagnoses, we know the sooner a deficit is recognized, these patients can be aligned with the appropriate team members to begin treatment. When they are implemented into a patient-centered plan of care earlier in the course of the injury, the long-term outcomes have been shown to be significantly improved. For example, Schutz & Trainor³, demonstrated that best treatment outcomes may be achieved when cognitive rehabilitation is presented in a context of interdisciplinary rehabilitation initiated shortly after injury. Many times, there is overlap between various therapeutic disciplines whose training allows each to contribute synergistically to a certain domain of deficit.

The continuum of rehabilitative care following an injury may range from acute inpatient rehabilitation to a program centered in the community with an outpatient focus. According to the CDC¹, the rate of TBI-related visits to the Emergency Department had grown rather steadily from 2001 thru 2010. Conversely, the rate of hospitalizations for these conditions has remained fairly constant and the



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Educational Collaboratives: Changing the Culture of Concussion

(continued)

- Only 1 in 2 (49%) adults know that a person does not need to stay awake for 24 hours after sustaining a concussion
- 8 in 10 (83%) adults believe people generally do not take concussions seriously enough
- **Only 1 in 4 (25%) Americans understand that safety equipment—such as helmets or mouth guards—cannot prevent the majority of all concussions, as scientific research shows**
- **Less than 1 in 5 (16%) adults believe there are no best practices to treat concussions**

Results from a poll like this confirm that we have our work cut out for us. Thankfully, we have a strong, knowledgeable, and committed group of professionals working collaboratively to change the culture of concussion: Nebraska Concussion Coalition.

Members include but are not limited to key government agencies, healthcare providers, club sport programs,

educators, and nonprofit agencies.

A project of interest, especially to you, the reader, is the Concussion Recognition & Management Training Modules.

With healthcare providers in mind, members of the Nebraska Concussion Coalition created six modules providing a comprehensive overview and guide for best practices to ensure every child sustaining a concussion has the best chance of a full recovery.

These modules are the basis for this NMA edition; a publication containing eight articles written by coalition members.

Our sincere thanks to coalition members and to Carole Bates and her team at Nebraska Medical Association for allowing us the opportunity to share our knowledge with those of you who are on the frontline every day.

If you have any questions, you can reach me at peggy@biane.org, www.biane.org, or (402) 890-0606 ☐

Concussion Management: It Takes a Village (continued)

rate of deaths has demonstrated a notable decline since 2007. This would seem to indicate there are more patients being discharged home, possibly with minimal follow up or referral to appropriate therapies to focus on symptom improvement. Additionally, as more patients are surviving catastrophic events, it is essential that there is collaboration amongst the treatment team to maximize one's recovery in both physical and cognitive domains.

There are several local, dedicated multidisciplinary clinics, for both concussion and TBI patients which allow them to be evaluated by a specialist in these injuries, commonly a physiatrist, in addition to therapists from a variety of backgrounds to develop a comprehensive treatment plan. A physiatrist is a specialist in Physical Medicine & Rehabilitation (PM&R) whose focus is to treat patients with a wide variety of conditions affecting the brain, spinal cord, nerves, bones, joints, ligaments, muscles and tendons. Patients are then enrolled in their

respective programs which are focused on their specific presenting complaints and examination findings. The real-time communication that can be completed between the treatment team in this type of setting allows for quick modifications and streamlining the plan of care. I would encourage anyone who sees a patient with an underlying TBI diagnosis to ensure they are functioning at their highest capacity and, if not, make an appropriate referral to a team of providers dedicated to caring for these individuals.

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- 1) Centers for Disease Control and Prevention. Signs and Symptoms, Concussion and TBI website (<https://www.cdc.gov/traumaticbraininjury/symptoms.html>). Accessed February 14, 2017.
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Developing a Concussion Knowledge Curriculum

By Arthur Maerlender, PhD, ABPP-CN
 Kate Higgins, PsyD
 & Todd Caze, Graduate Research Assistant
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 University of Nebraska-Lincoln

All 50 states have laws regarding return to play following concussions in youth sports and eight states have laws regarding return to learn. These statutes indicate the need for training for those involved in concussion management; however, there are no specific curricula for directing that training. Based on previous work (including the modules discussed by Dr. Moffatt in this issue), we developed a set of specific domains of knowledge (competencies) that focused on the behavioral aspects of concussion management. In concussion management, after the initial status is deemed to be neurologically safe, the bulk of the work is managing behavior to prevent additional injury and/or prolonged recovery (secondary prevention). Further, this behaviorally-oriented approach fits well within existing school procedures such as Positive Behavioral Support, and Response to Intervention models.

Additionally, this study provided an opportunity for initial validation of test questions assessing appropriate knowledge about concussion management from a non-medical (behavioral) perspective. The Academy of Brain Injury Specialists (ACBIS) of the Brain Injury Association of America already provides knowledge certification for care workers in rehabilitation settings, and a specific test of concussion knowledge was of interest to them. Data from this project helped to establish their concussion certificate.

Staff from CB3 and the Brain Injury Association (now Alliance) of Nebraska provided trainings based on these 10 competencies (below) to concussion management teams from four Nebraska schools (public, private, all grades), including a large group of speech and language pathologists. A total of 99 school personnel with various levels of self-reported experience participated in the trainings and data collection. Assessments of Competency relevance were obtained immediately after the last training session and again at five month follow-up. Competency relevance was based on how useful the information was for



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doing their own concussion management work. A pre-post test of knowledge was used to determine knowledge gain from the trainings, and satisfaction surveys were obtained at the end of training.

The surveys of competency relevance both immediately following training and at five month follow up confirmed their usefulness while strong training satisfaction ratings were also obtained. Across participants, the knowledge test scores improved significantly after training ($p < .001$) as well. Those participants who self-reported having the least knowledge before training, gained the most after training.

As a first step in defining an effective training curriculum, this study supports the use of a specific set of competencies for concussion management from a behavioral perspective and, further, provides validation for assessment of knowledge with regard to these competencies.

Concussion Knowledge Competency Descriptions

1) BASIC NEUROANATOMY

This module covered the building block of the brain - neurons and axons - and how these structures transmit information through the brain. It covers the different cortical lobes and functions of the brain and how the brain changes through the developmental stages.

2) BIOMECHANICS OF INJURY

This module discussed the different mechanisms of injury, such as linear and rotational forces. The “neurometabolic cascade,” or the ionic and molecular fluctuations that occur in the brain after an injury and the presumed effects on recovery are presented. Traumatic

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Developing a Concussion Knowledge Curriculum (continued)

brain injury severity rating and brain imaging options after concussion are covered.

3) CONCUSSION BASICS

A basic definition of concussion is presented, and the many types of symptoms that can result from a concussion are outlined. Chronic traumatic encephalopathy and post-concussion syndrome are also defined and discussed.

4) RISK FACTORS

Concussion management as risk reduction is the context of this module. Factors that increase the risk of sustaining a concussion or experiencing protracted recovery after experienced a concussion are listed. The heightened danger of receiving a second concussion before recovering from the first is also reviewed.

5) PREVENTION

This module presents the concepts of primary, secondary, and tertiary prevention in relation to concussions, together with the various strategies that can be applied at each level. Concussion management as secondary prevention is highlighted.

6) EVALUATION

This module covers the evaluation of concussion at four time points; baseline, sideline, acute assessment, and serial monitoring assessments. The tools that can be used including graded symptoms checklists, neuropsychological tests, vestibular and balance assessments and ocular-

motor assessments are discussed and demonstrated.

7) ASSESSMENT PROCEDURES

This module addresses basic psychometric concepts ("psychometrics for normal people") such as types of test scores, reliability, and validity and their implications for testing in concussion management. Examples of common mistakes are provided.

8) POST-ACUTE AND CHRONIC TREATMENT APPROACHES

This module presents treatment options for individuals experiencing protracted recovery from concussion. Education about concussion, cognitive rest, active rehabilitation, and stress-reduction techniques are reviewed and demonstrated.

9) INDIVIDUAL RECOVERY AND THE ROLE OF THE SCHOOL

This module covers return-to-learn and return-to-play protocols. Academic adjustments for the various post-injury symptoms clusters are discussed, and specific ways that teachers can support concussed students in the classroom are included.

10) PROGRAMMATIC CONCUSSION MANAGEMENT

This module covered the elements of local state concussion law, and the return-to-learn and return-to-play policies. Individual school return-to-learn policies are reviewed for individual school presentations.

Concussions and the Classroom: Bridging the Gap

By Becky Wardlaw, MA, ATC
Sports Medicine Athletic Trainer
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Intern, Brain Injury Alliance of Nebraska

Cathy A. Wyatt
Community Outreach Director
Brain Injury Alliance of Nebraska

According to the CDC, "32,165 concussions were reported in children under 19 in 2012" (Loehrke, 2012)

Consider Samuel's story: Samuel is a 9th grade student who recently experienced his second concussion during the third soccer game of the season and he continues to display post concussive symptoms days after the incident. Not only will Samuel have to wait to receive medical clearance to return to soccer practice and games, he also faces significant challenges when preparing to return to the classroom. His first days back to school, Samuel experiences frequent headaches, sensitivity to light and noise, occasional blurred vision and difficulty with concentration. Samuel, along with other school aged youth in Nebraska that have experienced a concussion, face an uphill battle in their recovery and in safely returning to school and activity. It is important that families, teachers and healthcare providers work together as a team and are well equipped with what resources are available for these students as well as what



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Cathy A. Wyatt

accommodations can be made for them to best contribute to their success in returning to school and activity.

Return to Learn

What is it?

Return to Learn is an amendment to the Concussion Awareness Act that was passed in July 2012. The Return to Learn Amendment was added in July 2014, stating that a return to learn protocol should be established for students that have sustained a concussion. The protocol shall recognize that students who have sustained a concussion and returned to school may need informal or formal accommodations, modifications of curriculum, and monitoring by medical or academic staff until the student has fully recovered from their concussion.

What does this look like in schools?

Each school can have a variation of what these accommodations look like, but here are some common accommodations for the following common symptoms seen with concussion:

Concussion Symptoms	Implications at School	Potential Adjustments in School Setting
Headache (most common symptom)	<ul style="list-style-type: none"> Poor concentration – may vary throughout the day; 	<ul style="list-style-type: none"> Frequent breaks Rest as needed in nurse's office or quiet area
Dizziness/ Lightheadedness	<ul style="list-style-type: none"> Standing quickly or walking in crowded environment may present a challenge Often provoked by visual stimulus (rapid movements, videos, etc.) 	<ul style="list-style-type: none"> Allow student to put head down if symptoms worsen Turn off fluorescent lights Early dismissal from class to avoid busy hallways
Visual Symptoms <ul style="list-style-type: none"> Light Sensitivity Double Vision Blurry Vision Noise Sensitivity 	<ul style="list-style-type: none"> Trouble seeing slide presentations, movies, smart boards, computers, handheld computers (tablets) Difficulty reading & copying Troubles with various noises in several school settings (band, hallways, lunchroom, etc.) 	<ul style="list-style-type: none"> Reduce brightness on the screens Student may wear hat or sunglasses in school Audiotapes instead of books Consider use of earplugs Early dismissal from class
Thinking/Cognitive Symptoms <ul style="list-style-type: none"> Difficulty concentrating or remembering 	<ul style="list-style-type: none"> Challenges learning new tasks and comprehending new material Difficulty with recall Lack of focus in the classroom Difficulties with test-taking 	<ul style="list-style-type: none"> Assess knowledge using multiple-choice instead of open-ended questions Consider tape-recorder for note taking Provide alternative testing styles (oral vs. written instructions)

(continued on Page 18)

Concussions and the Classroom: Bridging the Gap (continued)

While it is true that concussed students must be 100% symptom free before Return to Play, students Do NOT and Should NOT be symptom free to Return to School.

KEEP IN MIND:

Adjustments need to be:

- Fluid
- Flexible
- Need to be added immediately
- Need to be removed as soon as no longer needed.

What is Return to Activity?

Students must return to full functioning (no accommodations) in the classroom before starting a return to play protocol.

*Medical Clearance **is not** required for Return to Learn

*Medical Clearance **IS** required for Return to Activity

What does collaboration look like?

Communication among the student, parents, Concussion Management Team (CMT), and healthcare provider is crucial for ease of transition back into school. As medical professionals identify the health needs of the child and the school professionals identify the appropriate academic supports. The interdisciplinary team can ensure the plan of care is best tailored to the needs of each student and family.

CMT PROCESS

As soon as the school is made aware of the injury:

- 1) **Assign the CMT point person** to contact the family.
- 2) **Post-Concussion Symptom Checklist:** Ask the parent and student to rate the student's symptoms post injury.
- 3) **Schedule a meeting** with the student, parent, and CMT as soon as possible to develop a Return to Learn plan if the student is still symptomatic.
- 4) **Create and implement** a concussion management plan with sound procedures that support the concussed student.
- 5) **Ensure all members** of the student's academic team are aware of accommodations and changes to his/her plan of care.
- 6) **Adjust and readjust** until the student no longer has special needs resulting from the concussion.

Students should return to academics with support and guidance from the healthcare provider in collaboration with the CMT who has the responsibility to implement, monitor, and adjust the student's individualized return to academics plan. Although most symptoms clear within 3-4 weeks, in some cases, symptoms may not clear for months. For students with prolonged symptoms, formal procedures for learning supports will be initiated.

What resources are out there?

Brain Injury Regional School Support Team:

BIRSST 5 regions of Nebraska



For more information or to get in contact with a specific region:

CENTRAL REGION

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Concussions and the Classroom: Bridging the Gap (continued)

What does the Return To Learn Progression look like?

Students returning to school following a concussion should follow a gradual progression. Since each concussion and student is different, students returning to school from a concussion may return at a different stage. It is important to note that when students return to the classroom they may need to attend school part time before returning to school full time. It is also imperative to note that students with symptoms can be permitted back into

the classroom. They do not have to be symptom-free prior to returning to school.

Students do not need a physician note to receive academic accommodations. See below for an example of what a graduated Return to Learn school strategy can look like: Keep in mind each student and concussion is different. One student may start at stage 3, one may not even need academic accommodations. . .

Stage	Aim	Activity	Goal of each step
1	Daily activities at home that do not give the child symptoms	Daily activities of the day (eg. Reading, texting, screen time) Start with 5-15 minutes at a time & gradually build up	Gradual return to daily activities
2	School activities	Homework, reading or other cognitive activities outside of the classroom	Increase tolerance to cognitive work
3	Return to school part-time	Gradual introduction of schoolwork, may need to start with a partial school day, or with increased breaks during the day	Increase academic activities
4	Return to school full time	Gradually progress school activities until a full day can be tolerated	Return to full academic activities and catch up on missed work

Taken from the 5th international conference on concussion in sport held in Berlin, October, 2016. <http://dx.doi.org/10.1136/bjsports-2017-097699>

ARTICLE RESOURCES

- 1) Nebraska Department of Education: Brain Injury Regional School Support Team
 - <http://www.education.ne.gov/sped/birsst.html>
 - Bridging the Gap from Concussion to Classroom: Return to Learn
- 2) Nebraska Department of Health and Human Services: Concussion Training Modules
 - Concussion Awareness Act-Training for Coaches, Parents, Students
 - <http://dhhs.ne.gov/publichealth/ConcussionManage/Pages/cr00.aspx>
 - <http://dhhs.ne.gov/publichealth/concussion/Pages/Home.aspx>
- 3) Concussion ABC's posted by the Centers for Disease Control and Prevention
 - <http://www.cdc.gov/concussion/HeadsUp/schools.html>
- 4) Nebraska Concussion Coalition: A statewide educational collaborative aimed at increasing awareness of current issues and research pertaining to concussion and other types of brain injury.
 - For more information contact Peggy at 844-423-2463
- 5) British Journal of Sports Medicine: *Consensus statement on concussion in sport—the 5th international conference on concussion in sport held in Berlin, October 2016*; <http://dx.doi.org/10.1136/bjsports-2017-097699>
- 6) REAP Guidelines
 - <http://biacne.org/concussion/reap-manual.html>
 - McAvoy, K. (2013) REAP the benefits of good concussion management. Centennial, CO: Rocky Mountain Sports Medicine Institute Center for Concussion.

7.17.17

CONCUSSION

ASSESSMENT AND MANAGEMENT

An evidence-based symposium addressing the latest research, resources, protocols, and treatments.

Monday, July 17

UNL Memorial Stadium West Stadium Club

8:00 AM - 5:00 PM

All are welcome; including Physicians, Athletic Trainers, School Nurses, and Allied Health Professionals.

This event is made possible by UNL Athletic Medicine, CB3, and Brain Injury Alliance of Nebraska, and UNMC Center for Continuing Education. More information available at: <http://cb3.unl.edu>.



Credit Statements

This activity has been approved for AMA PRA Category 1 Credit™.

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education through the joint providership of University of Nebraska Medical Center, Center for Continuing Education and The University of Nebraska Lincoln.

The University of Nebraska Medical Center College of Nursing Continuing Nursing Education is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This activity is provided for 7.0 contact hours under ANCC criteria.

This program meets the criteria of an approved continuing education program for Emergency Medical Services.

Continuing education for ATC's will be provided through University of Nebraska-Lincoln Athletic Medicine, pending approval.

New Members

Lincoln

Joshua Miller, MD

Omaha

Megan Andrews

Ke Arkfeld

Samuel Bierner, MD

Ben Branigan

David Bunker

Jakob Dovgan

Liz England

Marcus Fearing

Stephen Giacomazzi

Joy-Marie Hermes

Juliana Kennedy

Bryan Krajcek, MD

Sarah Larsen

Howard Liu, MD

Kenneth Miller

Connor Mulhall

Elizabeth Null

Blair Racker

Brian Reilly

Mohan Satish

Ethan Sawyer

Aaki Shrestha

Phillip Stratton, MD

Maranda Thompson

Scott Vosik, MD

Nicholas Wegner, MD

Jay Zeng

Necrology

Larry L. Hansen, MD

Grand Island

3/5/2017

Dale W. Ebers, MD

Lincoln

4/23/2017

Daniel P. Harrahill, MD

Saint Paul

4/1/2017

Naila Haroon, MBBS

Omaha

2/9/2017

Orlando G. Bare, MD

Joplin, MO

4/3/2017



Ask a Lawyer

May 1, 2017

Private equity firms are in the news lately with multimillion dollar purchases of large medical group practices. What is a private equity firm, and what is it trying to accomplish by purchasing medical practices?

Private equity firms are in the news lately with multimillion dollar purchases of large medical group practices. What is a private equity firm, and what is it trying to accomplish by purchasing medical practices?



A private equity ("PE") firm is a business enterprise that makes investments in companies whose stock is not traded on a public exchange. Instead, PE firms organize

and pool capital from a variety of sophisticated investors such as pension funds, insurers, institutions, sovereign investors, and high net worth individuals who are willing to risk their investment to obtain much higher rates of return than available elsewhere. Many PE firms structure their arrangements with investors by creating separate business entities such as limited partnerships for purposes of investing as a PE fund. Using different business entities with limited liability segregates the risk of one type of investment from others. Generally, investors commit their invested assets for up to 10 years. If the investment scores big, investors with PE firms can enjoy rates of return of up to 30% depending on economic conditions at the time.

Investing capital in a business is just one part of what private equity firms do. PE firms "buy and build" equity in private businesses. Rather than investing in start-up ventures as venture capitalists do, private equity firms acquire and refine existing businesses to add value and make the business attractive in the market, eventually selling the business to capture the substantial return its investors seek. Private equity firms also invest their time and expertise to make their portfolio assets attractive to the market by building increased efficiencies, better cash flow, and profitability. By doing so, they reposition the acquired assets for possible future initial public offerings or to be purchased by an interested private buyer.

Private equity activity does not always focus on the medical practice itself for acquisition. Sometimes, ancillary business lines associated with a medical practice, such as a surgery center, urgent care centers, or management services, rather than a medical practice itself are purchased for private equity investment. Private equity firms may also work to consolidate medical practice assets.

So, to answer why a private equity firm would want to purchase a medical practice, the easy answer is "to make money." Not every investment will be a "winner," and some may be a "bust." Nevertheless, the more successful private equity managers have become adept at identifying undervalued assets in various industries, including health care. They have also developed skills in managing businesses and using resources in health information technology, data analysis, finance, and compliance to operate such businesses more efficiently.

What can I do to make my practice an attractive candidate for purchase?

There is little question that the larger a practice is now, the more physicians and advanced clinicians it has, and the more patients served by a practice, the more attractive that practice may be for potential private equity transactions. The size of a practice may not be as important, however, as the type of services provided. Certain practice areas have been of keen interest for private equity investment, namely, dermatology, lab companies, urgent care centers, pain management centers, hospital-based practices such as anesthesia, and primary care.

Whether your practice is in one of these highly-favored practice categories, you can enhance the value of your practice in the market by considering the following questions:

(1) Can some aspects of your business be subdivided? Sometimes it is the side revenue stream that is attractive to an investor.

(2) How current are your entity documents? If you have not looked at your entity documents in the last 10 years, it is time to do so. It is not unusual to find corporate bylaws that bear no resemblance to how a practice entity

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Empathy and Litigation

Listening to and Understanding Patient Concerns

By COPIC's Patient Safety and Risk Management Department

A 2016 Emergency Medical Journal article¹ examined the relationship between empathy and litigation. The authors enrolled two groups of patients into a randomized, double-blind controlled trial. The subjects watched simulated discharge discussions between physicians and standardized patients; half of the videos differed only by the inclusion of two brief empathy statements. These verbalizations included: 1) a reflection on the patients' concerns about their symptoms; and 2) a reflection on their health awareness.

After watching the video, subjects were asked to score (in a five-point Likert scale) their thoughts regarding suing the physician in the event of a missed outcome leading to lost work (primary outcome), and four measures of satisfaction with the physician encounter (secondary outcomes). The empathy group had significantly fewer thoughts around litigation. In addition, the measures of satisfaction with the encounter were significantly better in this group.

In this context, empathy is defined as "the capacity to understand or feel what the patient is experiencing from within the patient's frame of reference." Empathy also involves being able to communicate that understanding back to the patient. How you respond to the patient throughout the course of an interaction will determine not only how much information you will elicit, but will also form the core of your ongoing working relationship with the patient.

This area has been evaluated before by Wendy Levinson, MD et al in a 1997 JAMA article². In that landmark study, primary care and surgical specialists were divided into claims and no claims groups. Significant differences in communication behaviors of the two groups were identified in primary care physicians, but not in surgeons. Compared to the "claims" primary care physicians, the "no-claims" primary care physicians used more statements of orientation, educating patients about what to expect and the flow of a visit.

No-claims physicians laughed and used humor more, and tended to use more facilitation, soliciting patients' opinions, checking understanding, and encouraging patients to talk. They also spent longer in routine visits than claims primary care physicians (18 versus 15 minutes), and the length of the visit had an independent effect in predicting claims status. The study concluded that routine physician-patient communication differs in primary care physicians with claims versus without prior claims. The study identifies specific and teachable communication behaviors associated with fewer malpractice claims for primary care physicians.

Most physicians are empathic, and that's often why they go into medicine. The question is whether patients know that their doctors are feeling that empathy, and whether doctors are able to express that to a patient in such a way that the patient feels supported. The behavioral aspects of empathy and the empathic response can be assessed, and should be integrated into medical schools' core communication skills training.

The skills that build empathy are active and reflective listening:

- Active listening involves looking and acting interested in the speaker, using good body language, leaning in, nodding understanding, and trying not to interrupt the speaker. This is a skill that takes practice and will allow you to gain more information, understand viewpoints, and build a therapeutic relationship.
- Reflective listening is the next level of communication. It is borrowed from therapy techniques and it involves starting with active listening then seeking to understand what the speaker said and then offering that back to them. Often you can use the patient's own words. Special attention is paid to emotional feelings not just content.

Is it all a matter of saying the right words and being sure to repeat the patient's expressed ideas, values, and feelings? We know that our nonverbal messages count more than our verbal ones and that if there is a discrepancy

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Ask a Lawyer May 1, 2017 (continued)

operates. Taking time to address these clean-up items may pay dividends to you in a future transaction by avoiding unnecessary costs as part of a larger transaction.

(3) Do your entity documents contain “drag along,” or “tag along rights”? “Drag along rights” are the rights of founding or majority members of an entity to require minority owners to participate in the sale of an entity on the same terms and conditions. “Tag along rights” are the mirror image of “drag along rights” and protect minority owners in a sale, giving them the ability to join in the sale of business interests if a majority owner sells his or her interests in a company.

(4) Are contracts with key employees assignable to a new owner? Often the good will and value in a company is in its people, their relationships, experience, and expertise. Having the right to assign employment agreements to a

new entity and to limit an existing employee’s ability to compete against the practice in certain respects may help the entity retain and enhance the value it brings to the marketplace.

Ask a Lawyer is a feature of the Nebraska Medicine. If you have a legal question of general interest, please write the Nebraska Medical Association. Answers to submitted questions are provided by the Nebraska Medical Association’s legal counsel, Cline Williams Wright Johnson & Oldfather, L.L.P., 1900 U.S. Bank Building, 233 S. 13th St., Suite 1900, Lincoln, NE 68508–2095. The answer in this issue was provided by Jill Jensen of the Cline Williams Law Firm. Questions relating to specific, detailed, and factual situations should continue to be referred to your own counsel.

4824-8342-2535, v. 1



Empathy and Litigation

Listening to and Understanding Patient Concerns (continued)

between the two, the nonverbal will be believed. If we attend to our phone messages or our pager while we are making pretense of listening to the patient, no one will be fooled. We must establish an open, forward leaning posture, eliminate distractions, use appropriate eye contact, and communicate through our appearance that we are interested.

Studies show a good bedside manner with greater

empathy has many benefits. It can sharpen your diagnostic skills; improve adherence, HCAP scores, and job satisfaction; reduce your risk for burnout; and make it less likely that you’ll be sued for malpractice. These benefits are true for all medicals specialties.

1) Emerg Med J 2016;33:548-552

2) JAMA. 1997;277(7):553-559



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Leave a Legacy



SCOTT J. SNYDER, JD, CFP®, CFA®, CIMA®
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“To Live, to Love, to Learn, to Leave a Legacy.” That subtitle of a book by Stephen R. Covey provides insight into our lives. Why is that last part so difficult? People’s eyes light up when they talk about how they want to impact the world, but mention estate planning, which is essentially preparing for the transfer of your “wealth” measured in financial and other terms, and, too often, the conversation crashes.

Almost everyone realizes the importance of planning, yet according to the American Bar Association, fifty-five percent of Americans die without a will or estate plan¹. Why the disconnect? Frequently cited reasons include aversion to talking about mortality, pervasive busy-ness leaving not enough time to plan, complexity, and even lack of awareness of having planning needs.

Do not fall into the trap. Ben Franklin wisely said, “An ounce of prevention is worth a pound of cure.” That 16:1 ratio might literally be accurate. A recent study estimates nationwide probate costs at \$2 billion annually.² Talk to someone cleaning up their parent’s unplanned estate. Listen to a devastated young family dealing with the aftermath of an unexpected death. “Costs” are not always measured in dollars.

Work with your advisor or attorney to get your plan in place. Commit to getting a will or trust in place. Ensure your finances are transferred according to your wishes. Protect your assets from unforeseen creditors. And, certainly for young families, provide for and protect young children. Make sure you also have power of attorney documents in place to protect against disability. Execute health care powers of attorney and living wills to provide guidance on difficult choices, should you need serious medical treatment.

These documents cover the basics, but remember, your legacy extends beyond money. Be intentional about passing on your values and your story. Remember, the proverb says, “A good man leaves an inheritance to his children’s children.”

¹ American Bar Association study quoted in FPA Journal of Financial Planning, March 2017

² Morris, Hay & Kinghorn, quoted in FPA Journal of Financial Planning, March 2017

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