LAW OFFICES OF
THOMAS J. WAGNER, LLC

www.wagnerlaw.net

PENNSYLVANIA OFFICE
8 PENN CENTER, 6TH FLOOR
1628 JOHN F. KENNEDY BOULEVARD
PHILADELPHIA, PA 19103
TEL: (215) 790-0761
FAX: (215) 790-0762

NEW JERSEY OFFICE
525 ROUTE 73 NORTH
FIVE GREENTREE CENTRE, STE. 104
MARLTON, NEW JERSEY 08053
TEL: (856) 241-7785
FAX: (856) 241-7786

DEFENDING THE MILD TBI CLAIM-DEFENSE STRATEGIES

Prepared by:
Law Offices of Thomas J. Wagner, LLC

8 Penn Center, 6th Floor, 1628 JFK Boulevard
Philadelphia, PA 19103
Tel: 215-790-0761 Fax: 215-790-0762

525 Route 73 North
FIVE Greentree Centre, Suite 104
Marlton, New Jersey 08053
Tel: 856-241-7785 Fax: 856-241-7786

Email: tjwagner@wagnerlaw.net

I. Defense Tactics Unique to Brain Injury Cases

1:00 to 2:00 Thomas J. Wagner

INTRODUCTION/BACKGROUND TO TRAUMATIC BRAIN INJURIES ("TBI")

The Congressional Brain Injury Taskforce estimates that approximately 1.4 million Americans experience a TBI each year and an estimated 3.2 million Americans are living with long-term, severe disabilities as a result of brain injury. The Taskforce notes that the national cost of TBI is estimated to be $60 billion annually. According to the Center for Disease Control ("CDC"), 20% of all TBIs result from motor vehicle accidents, mostly males between 15 and 25 years of age. Alcohol intoxication appears to be a contributing factor in both rate of occurrence and severity of injury.

However, available research seems to indicate that despite the large number of reported occurrences, most brain injuries are mild in nature and do not have a significant effect or impact upon an individual's continued functioning. CDC notes that about 75% of TBIs reported each year are concussions or other forms of mild TBI, commonly referred to as "post-concussion syndrome". These "mild" brain injuries – a clear misnomer – make up most of the TBI claims in litigation. We are focused on these "mild" brain injury claims today.

Even though the injuries are often statistically mild in nature, a review of typical TBI claims reveals that Defendants are presented with **descriptions** of severe and debilitating effects resulting from what seem to be low-energy accidents. Recent verdict research reveals reports of large settlements and jury verdicts in accidents that ended with no complaints of any loss of consciousness or claim of head injury. Later, the claims are presented with complaints of lost memory (pre- and post- accident), cognitive complaints/slowed responses, headaches, depression,

anxiety, mood, personality and relationship changes, overall confusion and resulting disability based on a claimed TBI. Often, these complaints – in some manner – pre-date the accident, and the plaintiff argues that the pre-existing condition had no effect, or was not as disabling, prior to the accident. These types of claims are difficult to objectively evaluate and expensive to defend. They rarely have positive objective test results, like positive CT or MRI scans. Instead, Neuropsychological testing appears to be the standard supporting evidence. That testing is offered as an evaluation of brain function to offer a picture of the pre-accident level of function.

In mild TBI claims, your neuropsychologist offers evidence to show the presence or absence of a neuropsychological disorder or injury/deficit and provides the causal link, or lack thereof, between the accident and the claimed injury.

At the outset, if you can retain a neuropsychologist to assist your investigation, do it. Neuropsychologists can offer guidance, focus and can direct your discovery efforts throughout the course of the litigation, including a review of the plaintiff's medical, employment, school and insurance claim materials along with any others acquired in discovery; can provide a valuable critique of the plaintiff's neuropsychological expert's report and raw data; and can and should assist with deposing the plaintiff and their experts.

As for the materials that you can rely on: EVERYTHING. The key point in your defense efforts is to acquire EVERYTHING related to this TBI claimant. EVERYTHING means EVERYTHING. So think on exactly what might be out there and expend the efforts to get it. The most powerful tool that we have as lawyers is the subpoena power. Use it to the fullest.

A. Finding Holes in Past and Present Medical/Emotional History;

1. **Is it something else**? Post-concussion syndrome symptoms include:

a. Temporary loss of consciousness.

b. Confusion.

c. Headaches.

d. Dizziness.

e. Fatigue.

f. Sleep problems.

g. Lack of energy.

h. Vomiting.

i. Nausea.

j. Delayed responsiveness.

k. Amnesia regarding the injury.

l. Slurred speech.

m. Looking dazed.

2. Major depressive episode symptoms include:

a. Feeling sad.

b. Loss of interest or pleasure in usual activities.

c. Feeling worthless.

d. Changes in sleep or appetite.

e. Difficulty concentrating.

f. Lack of energy.

g. Slowed speech.

h. Headaches.

3. While the symptoms are not exactly the same, they are similar – and even more so with the average historian - particularly with concentration, speech articulation and fatigue/lack of energy. In a 2005 study, nine out of 10 patients with depression met the "liberal" criteria for post-concussion syndrome even though they did not have a concussion. Five out of 10 met what was considered a "conservative" standard.
4. Counsel can effectively argue for a misdiagnosis of a permanent brain injury when the plaintiff is depressed – a treatable condition – unrelated to the accident.
    a. With young Plaintiff, this can significantly reduce the future damages. The key is to convince the jury that the continued medical issues of the plaintiff are treatable and not permanent. A diagnosis of depression can help diminish the value of concussion claims.

B. The Plaintiff's deposition: **THIS IS YOUR TRIAL, ASK THE QUESTION!**

1. Primarily there to establish who this person is – on video – and how they respond to hours of questioning. Typically, the Claimant will relax and you may be able to show dramatic differences between the claimed disabilities and the actual abilities:
    a. Partially for facts, but mainly for who the Plaintiff actually is:
        1. It shows:
            a. Memory;
            b. Diction;
            c. Physical abilities;

i. Ask to show what can be done in, e.g., range of motion, etc.

d. Endurance;

e. Cognitive function;

f. Credibility:

i. Reactions to topics; and Inconsistencies in areas of dispute;

ii. Of course, that will be explained by Claimant's counsel as the TBI talking – you can live with that. Let the adverse counsel do their job. More than likely, an overly aggressive counsel will create evidence that supports your claim by interrupting and suggesting. This often unnerves lay witnesses and may show adverse counsel's unwillingness to prepare or maybe Claimant just can't be prepared. These each have an effect on value as well

g. Social History:

i. Close relationships v. essentially estranged from everyone:

1. Parents;

2. Siblings;

3. Cousins;

4. Spouses/ex-spouses;

5. Children;
6. Friends;
7. Co-workers.;

2. **Videotape the depositions.** That baseline examination – which could be 10 hours of testimony – is invaluable to show a jury what this case is, and is not, about. Neuropsychological expert – along with any other expert - may rely on it that video to supplement their own exam – or in cases where the local courts will limit the number of your exam, can be used to offset any cross-exam questions like:

a. **Q: And you have never even met or examined my client? A: No, you objected to my exam, but I did review more than 10 hours of his/her sworn videotaped testimony where he/she described his/her life, history, symptoms and treatment.**

b. Defense experts can also use it to show that the presentation made by this claimant was significantly different from the presentation given in his testimony. Other Experts may include:

1. Psychiatrists;
2. Psychologists;
3. Cognitive, Speech and Occupational therapists;
4. Physiatrists;
5. Audiologists;
6. Neuro-radiologists to evaluate the MRI, CT's and other diagnostic studies;
7. Vocational and employability experts; and

8. Bio-mechanical reconstructions of the event to demonstrate that the accident did not contain enough energy to cause a TBI.

C. Who else to depose, and why?

1. Family members;
2. Co-workers;
3. Any victims of this person's personality/psychologic issues.

D. **Secondary Gain:** The neuropsychologist is particularly important in civil litigation claims to discuss the obvious underlying issue of secondary gain. Secondary gain is the social, occupational or interpersonal advantages that a patient derives from their symptoms. For example, secondary gain would exist where the plaintiffs claimed impairments are contributed to by an external motivator such as the desire for financial incentive arising from litigation. Often, the mere occurrence of the accident combined with Claimant's complaints are used to establish the accident as the cause of the cognitive deficits. Remember that the Claimant – who has experienced the asserted trauma of an accident and claimed injury that typically causes worry and anxiety, albeit short-lived - also has a financial incentive to appear impaired. It is your and your neuropsychologist's responsibility to determine whether there are deficits and whether those are the result of brain impairment from this accident, as opposed to psychological trauma, physical (peripheral) injury, malingering, a preexisting condition, or some combination of these causes.

E. **The Evolution of the Claim:**

1. The way the TBI symptoms develop is another fruitful area to incorporate into your defense story. Often, the symptoms are not asserted/recognized right away. Rather, those attributions of the claimed symptoms to the accident almost always develop weeks or months later to support the TBI diagnosis. Claimants have

several arguments to explain this delay in diagnosis. The following comparisons/examples show simple factual areas that fit into the defense story and explain the reason for the delayed symptoms:

a. Injuries reported at scene, if any;
b. Injuries reported in EMT/ambulance records;
c. Emergency Room records;
d. Acute phase treatment, if any;
e. Days lost from employment, if any;
f. Eventual attorney involvement, and when, compared with the timing of the first articulation of the TBI symptoms or diagnosis;
g. Practice Fields of initial providers v those involved afterwards;
h. Doctor's networks. Dr. Joe owns the PT facility and the MRI and always refers his patients to Dr. Ruth, etc., who also owns the EEG location and employs the physicians there.
    1. Defense counsel is not doing their job if they didn't evaluate the parties involved aside from the injured claimant. Certain doctors and lawyers have histories that should not be ignored and these factors can affect your case evaluation, as well as the type of defense that you may elect. Consider the:
        a. Reputations of treating doctors;
        b. Reputations of involved attorneys;
        c. Connections between those doctors and lawyers – are they business partners?

F. Begin in the beginning:

1. What was the nature of the accident? Rear-ender, T-bone, sideswipe
    a. Amount of damage
    b. Photos
    c. Speeds involved; Change of velocity
    d. Witness statements and observations of claimants functioning
    e. Claimant's self-report at scene
    f. EMT reports and observations
    g. Accompanying physical injuries
2. And do not forget pre-accident life events.;
3. Balance your focus on a perceived weak link, i.e., what needs more/less involvement and therefore more or less focus. Is it the:
    a. Claimant or Claimant's life/environment;
    b. Primary Doctor;
    c. Attorney;
    d. The Test Results;
    e. The Actual Testing;
        1. Validity;
        2. Over-interpreted; or
        3. Just plain wrong?
    f. Evolution of the Claimant's and their experts versions/Inconsistent History or claimed symptoms, timing and effect;
    g. Prior History, experience and conduct.

G. Initial exam;

1. Is there a delay?
2. What exactly was complained of:
3. Glasgow coma scale
    a. Accepted by the general community to determine the patients level of consciousness;
    b. GCS of 13-15 indicates a high probability for complete recovery. Most candid health professionals will conclude that there is almost always a complete;
    c. When not complete, there is almost always some underlying problem that pre-dates the accident.

H. Cumulative results of all studies organized for maximum impact:

1. EMS;
    a. EMT records history, usually thorough – indicates that the mind is working
    b. Any witnesses, police officers, Fire personnel, independent witnesses or the Defendant – what did they see?
2. First/scene history:
    a. NEXT – Same history given to the ER admission nurses and physicians'
    b. This often conflicts with the later history given to the Plaintiff's retained medical experts;
    c. Contrariwise, the later testimony that the Patient doesn't remember anything is not indicative of a TBI. That's something else;

3. Document the Evolution of the story:
    a. EMT record;
    b. ER records admissions;
    c. MRI, CT, X-ray date and results;
    d. Not including a later brain bleed – or something else supported by objective testing like and MRI or CT scan;

I. The Timeline for the development of the claim for Litigation:

1. Next treatment after Lawyer retentions;
2. Directions to use particular physicians from counsel;
3. Work notes and treatment history to continue to document the Evolution of the claim.

J. **A Wide variety of treating physicians works to your benefit**. Family doctors; work doctors; multiple treaters – all will have conflicting histories – not indicative of a TBI.

Especially since the Plaintiff's version is going to change – and his or her own physicians will be witness to that for you.

K. **What to Look for in Employer, Military, Internet and School Records;**

1. Attendance;
2. Discipline;
3. Grades;
    a. All reveal relatively accurate level of intellectual function; and
    b. Affects credibility - Plaintiff says he or she did well, but the grades are D's and F's?
4. Standardized tests;

5. Teacher remarks:
6. Life Stressors;
    a. Financial problems – significant for exaggerations and malingering;
    b. Criminal issues;
    c. Family, financial or marital problems – or some combination of all - typically are indicative of someone who has tremendous issues and stresses in life that are part of their make-up. And can be evidence of pre-existing depression, anxiety and personality disorders. This case may seek, essentially, to remove the human stress of personal support by its result. That must be considered;
7. Alcohol and substance issues, including opioids/Fentanyl use?
8. Supportive of the claim for secondary gain;
9. Evidence of Significant problems with functioning;
    a. May even have their own neuro-psych testing, psychological exams and conclusions;
    b. Often used in hiring decision, especially with executive level employees, municipal and police/fire hires;
10. Health insurance records;
11. Special Education Records/IEPs;
12. Internet:
    a. Instagram;
    b. Facebook;
        1. Trips;

2. Vacations;

3. Comments on current events;

c. Posted pictures and videos performing actions in places that were claimed to have been removed from their life due to this disability; E-mail addresses;

d. Postings – pre- and post;

1. Worldview hasn't changed

2. This is just like surveillance – but the claimants has done it for you and doesn't realize it;

13. Pre- and Post- accident claims and trauma:

a. It's odd that most of the TBI's have prior claims – and some subsequent – but that's typical too.

b. Do they have any impact on the injuries claimed in the subject accident;

1. Do they impact the claimant's credibility ability as a witness;

a. Prior claims may contradict this one;

2. Prior trauma and claims may provide support for the cause of the alleged disability and the pre-existence of any disability; Discovery developed in other suits/claims (new witnesses, doctors, IME's)

3. Treatments and medications,

4. Court records, especially on permanent injury claims;

14. Co-workers identities:

a. Liked him, didn't like him; had functional [problems at the job – personal life; school life and work life – the critical triumvirate] problems all along;

15. Universal Summary;

    a. Broken down by;

        1. Employment issues;

        2. Educational issues;

        3. Functional complaints;

        4. Physical injuries symptoms and complaints;

            a. Insignificant issues may become significant in the context of the constellation of facts;

            b. Organize the materials for reference – there will be a lot of data to use;

L. Using IMEs to Prove the Injury is Not Permanent – **TELL YOUR STORY**!

1. First – do you need one;

    a. Often described as a strategic decision – get one anyway. You will need that person listed as a witness to use him or her at trial. The last thing you want to face is your regret at not doing so.

2. Look at Plaintiff's neuro opinions:

    a. Thorough history?

    b. Fair interpretation and timing of reporting?

    c. Reputation for honesty and integrity?

    d. All of that is rare – because you will acquire information in discovery that was not available to Plaintiff's experts, so arrange it and tailor the report;

    e. Fully document your exam and use that to call the validity and accuracy of the Plaintiff's experts interpretations into question.

3. Use the IME to show:
    a. Admissions by Claimants' experts that fit defendant's theory
    b. Admissions by the Claimants of exaggeration, concealment, or misrepresentation;
        1. Even if denied, explain the difference and point it out specifically;
        2. Use the exam, history, analysis and opinions to support the impression that Claimant's expert analysis is not scientific; AND Attribute that bias in the medical opinions and testing that claimed to find a TBI when the actual facts, history and normal human variances would explain the test results;
    c. Even if there are some measurable deficits, they have no impact on Claimants normal functioning;
        1. Keep the specter of secondary gain in play.

M. Tips for Defending the IME;

1. First – use it to bolster your own credibility

    These experts are my eyes and ears – I am not a doctor and we are presented with these claims – which seem out of proportion to the energy in this accident. Why is this happening?

    So we asked Dr._____ to let us know. Here's what she found;

2. Use ALL of the evidence. Nothing beats a well prepared expert, especially in comparison to the alternative;
3. Raw data – Get it – it's the basis for the neuro-psych interpretations;
4. This is apparently the proof that will be called the objective evidence proving the disability
    a. Over-interpretation:
        1. What's normal for this claimants;
        2. Average?

N. Diagnosing Physician Deposition Strategies;
1. CV's and seminars taken/given;
2. Use the Internet:

O. What to Look for in Surveillance and Photographs;
1. Their admissibility!
2. The timing;
3. Intelligence on the Claimant and his or her lifestyle and location;

P. Spotting Inconsistencies/Exaggerated Severity in Symptoms;
1. Malingering:
    a. In an article called "A Comparison of Complaints by Mild Brain Injury Claimants and Other Claimants Describing Subjective Experiences Immediately Following their Injury," researchers saw that those involved in motor vehicle accidents experienced an altered mental state with no evidence of a TBI. In fact, individuals may describe the same altered mental state, consistent with being startled, upset, or agitated by the

accident or potential accident even where no injury occurred. For this reason, plaintiffs and perhaps their medical providers may be associating symptoms such as being dazed and confused with a potential TBI, where it could just be the result of shock or distress from the accident. Additionally, the article also noted that the symptomology associated with a TBI could be the result of other factors. For example, attention or memory problems or depression, all symptoms associated with TBI, have actually been found to also be common symptoms of chronic pain associated with orthopedic injury. It also noted that some symptoms, such as headaches, fatigue, irritability, and concentration problems have been found common in the general population at large.

The same article also conducted their own study of symptoms associated with TBIs, comparing personal injury claimants whose loss of consciousness and Glasgow Coma scale immediately after the accident indicated a potential MTBI (the MTBI group) with that of other personal injury claimants who did not fit that profile (the other claimants group).

That study noted a higher rate of reported anxiety, irritability, and depression among the other claimants group than the MTBI group. Reports of headaches, concentration issues, dizziness and confusion were comparable between both groups. Thus, it looks like many of the symptoms associated with TBI were also present in non-TBI claimants. The authors caution against confusing symptoms of a TBI with "general stress symptoms," which they indicate may lead to misleading and

erroneous diagnoses where no TBI actually exists. This possibility of misdiagnosis may cause the increased diagnosis of psychological claims or claims of TBI among plaintiffs.

If the symptoms seem genuine and associated with a TBI, and not general stress, recovery can be expected when compared to other TBI patients. That recovery rate can be used to determine whether or not the patient is displaying evidence of symptom magnification and/or malingering. A malingering patient might exaggerate or falsify an injury. So, while we know that there is a recovery rate; we can also generalize that you don't get worse; od developed new acute symptoms.

Malingering also involves not putting forth maximum effort during the testing process in an attempt to obtain results indicating a more severe impairment than there actually is or to show injury where no injury exists. As Clinical Neuropsychology noted in its article on detecting neuropsychological malingering, accurate assessment during neuropsychological testing is "dependent upon the patient putting forth his or her best possible effort!" That effort may be intentionally altered simply by being involved in the litigation process. by the defendants' expert. The plaintiff may attempt to exaggerate symptoms in an attempt to present a more severe impairment, hoping to increase the value of their case.

Q. Presenting Other Options for Plaintiff's Injuries – **WHAT ELSE COULD IT BE?**

1. **Generalized anxiety disorder** involves persistent and excessive worry that interferes with daily activities. This ongoing worry and tension may be

accompanied by physical symptoms, such as restlessness, feeling on edge or easily fatigued, difficulty concentrating, muscle tension or problems sleeping. Often the worries focus on everyday things such as job responsibilities, family health or minor matters such as chores, car repairs, or appointments.

The DSM-5, describes **a personality disorder** ("PD") as significant impairments in self and interpersonal functioning together with one or more pathological personality traits. In addition, these features must be (1) relatively stable across time and consistent across situations, (2) not better understood as normative for the individual's developmental stage or socio-cultural environment, and (3) not solely due to the direct effects of a substance or general medical condition. All of these PD's have features in common with symptoms complained of by TBI Claimants.

a. **Paranoid personality disorder:** Characterized by a pervasive distrust of others, including even friends, family, and partner. As a result, the person is guarded and suspicious, and constantly on the lookout for clues or suggestions to validate his fears. He also has a strong sense of personal rights: he is overly sensitive to setbacks and rebuffs, easily feels shame and humiliation, and persistently bears grudges. Unsurprisingly, he tends to withdraw from others and to struggle with building close relationships.

b. **Schizoid personality disorder:** The term 'schizoid' designates a natural tendency to direct attention toward one's inner life and away from the external world. A person with schizoid PD is

detached and aloof and prone to introspection and fantasy with little interest in social or sexual relationships, is indifferent to others and to social norms and conventions, and lacks emotional response.

c. **Schizotypal disorder:** Schizotypal PD is characterized by oddities of appearance, behavior, and speech, unusual perceptual experiences, and anomalies of thinking similar to those seen in schizophrenia. People with schizotypal PD often fear social interaction and think of others as harmful. They may develop so-called ideas of reference, that is, beliefs or intuitions that events and happenings are somehow related to them.

d. **Antisocial personality disorder:** Antisocial PD is much more common in men than in women, and is characterized by a callous unconcern for the feelings of others. The person disregards social rules and obligations, is irritable and aggressive, acts impulsively, lacks guilt, and fails to learn from experience. In many cases, he has no difficulty finding relationships but they turn out to be dramatic and short. Lots of crime here too.

e. **Borderline personality disorder:** In borderline PD, the person essentially lacks a sense of self, and, as a result, experiences feelings of emptiness and fears of abandonment with intense but unstable relationships, emotional instability, outbursts of anger and violence (especially in response to criticism), and impulsive

behavior. Suicidal threats and acts of self-harm are common, for which reason many people with borderline PD frequently come to medical attention.

f. **Histrionic personality disorder:** Characterized by a missing sense of self-worth, and reliance on attracting the attention and approval of others. They often seem to be dramatizing or 'playing a part' in a bid to be heard and seen. People with histrionic PD may take great care of their appearance and behave in a manner that is overly charming or inappropriately seductive. Dealings with others looks superficial, and, combined with sensitivity to criticism and loss, leads to the more rejected they feel, the more histrionic they become; and the more histrionic they become, the more rejected they feel.

g. **Narcissistic personality disorder:** Characterized by an extreme feeling of self-importance, a sense of entitlement, and a need to be admired. He lacks empathy and readily lies and exploits others to achieve his aims. To others, he may seem self-absorbed, controlling, intolerant, selfish, or insensitive. If he feels obstructed or ridiculed, he can fly into a fit of destructive anger and revenge.

h. **Avoidant personality disorder:** Characterized by a belief of believe that they are socially ineptitude or inferiority, and constant fear of embarrassment, criticism, and rejection. They avoid meeting others unless they are certain of being liked, and are

restrained even in their intimate relationships. Strongly associated with anxiety disorders, and may also be associated with actual or felt rejection by parents or peers in childhood.

i. **Dependent personality disorder:** Characterized by a lack of self-confidence and an excessive need to be looked after, requiring lots of help in making everyday decisions and passing on important life decisions to others.

j. **Anankastic personality disorder:** Characterized by excessive preoccupation with details, rules, lists, order, organization, or schedules; extreme perfectionism; and devotion to work and productivity at the expense of leisure and relationships. Typically doubting and cautious, rigid and controlling and dour. The apparent anxiety is caused by a perceived lack of control. Relationships with colleagues, friends, and family are often strained by unreasonable and inflexible demands.

R. Evidence Needed to Prove Full Recovery of Mild Brain Injury (No Fracture);

1. Functional:
    a. I get lost in strange places and I lose my keys”
    b. Ask about these – what are your problems;
    c. The direct you focus in discovery to resolving them;
    d. Don’t forget to ask “Why?”.
2. Clear objective results:
    a. No fracture;

b. Clean MRI;

    1. Always look at Alzheimer's and the like in older claimants;

    2. Get the prescription history – look for that medication

II. How to Creatively Present Medical Evidence to Judge and Jury

2:45 - 3:30, Thomas J. Wagner

A. Presenting Neuropsychological and Electrodiagnostic Test Results

1. Use your experts report, tests results and analysis. Juries need to hear, see and understand the evidence that support your argument. Use multiple modes of learning for this presentation. And, repetition is necessary. Take your time.

EXEMPLAR REPORT NO. 1 – MINOR CLAIMANT

Reason for Testing:

0-year old student, presented for testing in order to determine neuropsychological strengths and weaknesses.

Diagnoses: **Attention Deficit Hyperactivity Disorder Combined Type**

Dyslexia and Dysgraphia (Specific Learning Disabilities in ready fluency and written expression)

Generalized Anxiety Disorder

h/o of Post-Traumatic Stress Disorder

Summary

In the context of Low Average to Average general intellectual functioning, the profile of neurocognitive and psychological functioning indicates diagnoses of Specific Learning Disabilities in written expression (dysgraphia) and reading fluency (dyslexia), Attention Deficit Hyperactivity Disorder Combined Presentation, and Generalized Anxiety Disorder. Although others have endorsed the criteria for PTSD in the past, the etiology of Generalized Anxiety Disorder appears to be a combination of a predisposition to 'worry' as well as years of undiagnosed and untreated ADHD and learning disabilities. Specific deficits demonstrated during testing included:

- Visual motor analysis and synthesis
- Nonverbal reasoning and visual spatial manipulation
- Reading accuracy
- Reading comprehension
- Sentence composition
- Visual motor integration
- Organization and planning
- Nonverbal immediate attention
- Verbal immediate attention
- Graphomotor construction
- Learning and memory for graphomotor stimuli
- Task monitoring
- Variable processing speed
- Inhibition
- Mental set shifting

Strengths were demonstrated in the areas of nonverbal abstract reasoning, semantic word generation, multiplication fluency, and memory for auditory, rote, repetitive stimuli.

Academically, skills were quite variable, ranging from the Superior range in multiplication fluency, down to the Moderately Impaired range in accuracy during reading tasks. Although within the Average range, significant difficulty in pronunciation and sounding out of several words, including 'standing', 'watch', etc. In addition, he demonstrated reduced early reading skills given age (Low Average), failing to identify rhyming words consistently and beginning sounds for an item. 's comprehension of what he read fell within the Borderline Impaired range for functioning, demonstrating that poor fluency is adversely affecting ability to comprehend what he is reading. In sum, reaches diagnostic criteria for dyslexia. mother reported that he has been given additional instruction in reading; however, it does not appear to be sufficient in 'catching him up' to peers. On standardized academic testing, the majority of reading tasks fell 1 '/2 to 2 years behind expected grade equivalent. performed adequately in the area of mathematics, excelling in multiplication fluency. In the area of writing, completed the sentence composition subtest, which consists of two sections, combining sentences and creating sentences. For both of these tasks, performance fell in the Borderline Impaired range, indicating significant difficulty in this area. In addition, separate tasks of visual motor integration further indicated motoric difficulties with writing, supporting a diagnosis of dysgraphia.

Emotionally, presented as a pleasant and cooperative child. He was able to kid around with the examiner and appeared very relaxed and at ease throughout the testing session. On one self-report measure administered significant concern was endorsed in the area of attitude toward school. mild concern in the areas of locus of control, anxiety, and hyperactivity. and reported elevated concern in the area of anxiety and mild concern in the area of depression. Teacher also completed a teacher version of the measure and reported elevated concern in the area of anxiety.

Also used were the Millon Pre-Adolescent Clinical Inventory, a true/false test administered over the computer that measures a child's emerging psychological patterns. Validity scales indicated

that the measure was without underreporting or overreporting problems. Psychological discomfort and interpersonal patterns indicated by responses included:

- Social dependency and strong need for attention and security from others. Fear of being on own leads him to seek out interesting and popular peers. Despite attentional difficulties and anxieties, he acts socially gregarious and charming. He wants to be seen as charming, composed, and appealing to others. Social pleasantries may mask scholastic difficulties and troublesome emotions.
- He seeks harmony with others at the expense of own wishes and unsuccessfully attempts to retrain negative emotions and lack of control.
- He may value himself more in terms of relationships with others than own traits. He allies himself with others, especially authority figures and popular peers, in an attempt to bolster himself based on their competencies. When feeling rejected, he will seek approval and reassurance from others.
- Results of measure indicated a mild anxiety condition that is evident in agitated and ill at ease state. **Symptoms can be prompted by failure and discord between current functioning and expected functioning.**
- **Hyperactivity and other core features of ADHD are present and are likely adversely affecting ability to perform and achieve academically.**
- He may attempt to draw attention to himself through immature and regressive behaviors, which should be avoided. He requires clear rules at home and school and should be provided frequent praise and reinforcement for following these rules.
- The anxiety indicated through responses can be normal for age and family should work to reduce conflict within the family and respond to anxieties with calm confidence, caring, and warmth.
- may be reluctant to admit to shortcomings and may be evasive and unwilling to face these shortcomings.

As mentioned, this is a snapshot of current psychological functioning and may not be totally accurate of 's psychological functioning at all time but more patterns emerging. Given all the data collected and the lifelong history of psychological functioning, the diagnosis of Generalized Anxiety Disorder is a better indicator of current psychological functioning. Although he may have fit criteria for Post-Traumatic Stress Disorder in the past, the breadth of fears and anxieties are better captured in the diagnosis of GAD than PTSD. In addition, given undiagnosed and untreated ADHD and learning disabilities, this will contribute significantly to anxiety. It is expected that as these conditions are diagnosed and treated, the anxiety will dissipate.

Recommendations:

Continued medication monitoring is recommended. If 's anxiety decreases, medications (stimulants) should be considered to treat the symptoms associated with ADHD.

Given the current evaluation results, appears to qualify for school-based modifications under an Individual Education Program as per the IDEA. An appropriate classification at this time would be Specific Learning Disability (Reading Fluency, Written Expression). The following modifications and accommodations should be included in plan:

- A study guide should be provided at least one week prior to tests and quizzes so that has adequate time to prepare and review the material.
- Extended time for all tests and quizzes, including standardized testing.
- Preferential seating closest to the point of instruction to minimize distractions.
- A distraction-free environment must be provided for all tests and quizzes.
- Frequent breaks in order to help to maintain arousal levels, i.e. if he is required to sit in a classroom for more than 20 minutes, allow him to go for a walk, go to the water fountain, or run an errand for the teacher that will only require 2-3 minutes. This will allow him to redirect attention for a few minutes and 'recharge battery.'
- Pair written instructions with oral instructions to ensure he is paying attention and understanding all the directions to a given task.
- Preferential seating toward the point of instruction.
- Break up long assignments into shorter tasks and/or shorten assignments into smaller assignments
- Cue to hand in homework assignments if he fails to hand in assignments that are due that day
- A note taker or access to teacher's notes due to difficulty with set shifting and 'keeping up' with note taking in class.
- A cue to check over work the last five minutes of a test/quiz to help him identify careless mistakes or missed questions
- Learning support should be provided in reading, including decoding, sight word vocabulary development, and reading comprehension. requires a multimodal approach to reading instruction, i.e., Orton-Gillingham, Wilson Reading, Lindamood Bell, etc.
    - Teaching strategies within the multimodal reading program should include: a multi-sensory approach to instruction, intense instruction and practice, direct/explicit instruction, systemic and cumulative instruction whereby previously learned material is constantly brought into future lessons, synthetic and analytic instruction, and diagnostic teaching whereby the instructor assesses understanding of and ability to apply the learned rules. Re-teaching may be necessary at any time to ensure understanding.
    - A comprehensive reading program that incorporates phonemic awareness, phoneme/grapheme correspondence, six syllable subtypes, probabilities and rules of the English language, and roots, affixes and morphology all of which are used to expand vocabulary, comprehension and spelling of unfamiliar words.
- Comprehension checks should be administered after is given directions in order to ensure he understood the given directions.
- Oral directions as well as oral administration of tests/quizzes should be provided due to reading deficits.
- Allow more time for written tasks including note-taking, copying, and tests
- Allow to begin projects or assignments early
- Consider reducing the amount of work for individual assignments. Stress quality over quantity.
- Encourage learning keyboarding skills to increase the speed and legibility of written work.

- Have prepare assignment papers in advance with required headings (Name, Date, etc.)
- Instead of having write a complete set of notes, provide a partially completed outline so he can fill in the details under major headings (or provide the details and have Child provide the headings).
- Allow to dictate some assignments or tests (or parts of tests) using a 'scribe'. Train the 'scribe' to write what he says verbatim ("I'm going to be your secretary") and then allow to make changes, without assistance from the scribe.
- Remove 'neatness' or 'spelling' (or both) as grading criteria for some assignments, or design assignments to be evaluated on specific parts of the writing process.
- Teach abbreviations in some writing (such as b/c for because). Have develop a repertoire of abbreviations in a notebook. These will come in handy in future note-taking situations.
- Reduce copying aspects of work; for example, in Math, provide a worksheet with the problems already on it instead of having copy the problems.
- Break writing into stages and teach to do the same. Teach the stages of the writing process (brainstorming, drafting, editing, and proofreading, etc.). Consider grading these stages even on some 'one-sitting' written exercises, so that points are awarded on a short essay for brainstorming and a rough draft, as well as the final product. If writing is laborious, allow to make some editing marks rather than recopying the whole thing. On a computer, he can make a rough draft, copy it, and then revise the copy, so that both the rough draft and final product can be evaluated without extra typing.
- Do not count spelling on rough drafts or one-sitting assignments.
- Encourage to use a spellchecker and to have someone else proofread the work, too. Speaking spellcheckers are recommended, especially if may not be able to recognize the correct word (headphones are usually included).
- Allow to use cursive or manuscript, whichever is most legible
- Consider teaching cursive earlier than would be expected, as some students find cursive easier to manage, and this will allow him more time to learn it.
- Allow to use the line width of choice. Keep in mind that some students use small writing to disguise its messiness or spelling, though.
- Allow him to use paper or writing instruments of different colors.
- Allow him to use graph paper for math, or to turn lined paper sideways, to help with lining up columns of numbers.
- Allow to use the writing instrument that is most comfortable. Many students have difficulty writing with ballpoint pens, preferring pencils or pens, which have more friction in contact with the paper. Mechanical pencils are very popular. Let find a 'favorite pen' or pencil (and then get more than one like that).

Continued psychotherapy to address Generalized Anxiety Disorder with particular attention given to ability to cope with life stressors, fears, and ability to manage symptoms related to ADHD, particularly in the area of executive functioning.

Given the areas of neuropsychological difficulties exhibited by , the following recommendations are being made:

Organization and Planning:

- Provide concrete organizers such as hooks, cubbies, cabinets, etc. for him to help him better organize materials.
- Limit the number of steps in a task or activity.
- Structure the thinking process through the use of graphic organizers (outlines, pie charts, etc.).
- Set up external organization aides.
- Assist him in setting short-term goals for completing assignments and provide reinforcement for each step completed.
- Provide frequent opportunities to review schedules and tasks to be completed.

Attention

- Provide a quiet, distraction free environment for to complete work.
- Remove unnecessary distractions from the learning environment.
- Limit background noise.
- Provide concrete visual cues to attend to.
- Limit the amount of information on a page.
- Adjust assignments to the length of attention span.
- Focus attention on the most salient aspects of the lesson.
- Maintain a brisk pace between tasks.
- Maintain high success rate through selection of appropriate instructional content, while still maintaining a challenge.
- Reinforce on-task behavior.
- Work with in a small-group setting or one-to-one as much as possible.

Memory and Learning

- demonstrated a relative strength in learning and memory for rote, repetitive, auditory stimuli; therefore, he should be taught strategies that will utilize this strength, including repetition and quizzing/being quizzed. Repetition will also be effective for retention.
- Make the material to be learned as meaningful as possible.
- Develop active learning situations.
- Verbal rehearsal and self-talk should be used.
- Write down key information to be remembered.
- Model new skills.
- Provide practice of new skills and information.
- Sequence skills to build on previous learning.
- Provide cumulative review of previously taught material.

The website www.chadd.org is a helpful resourceful for parents and children facing ADHD.

NEUROBEHAVIORAL HISTORY

Milestones were reached within normal limits. Fine and gross motor skills were also developed without incident. 's appetite is described as 'normal' but picky. He prefers spaghetti, peanut butter sandwiches, chicken nuggets, macaroni and cheese, etc. sleeping is described as variable. He has been regulated in the past with Melatonin. He now gets 10-11 hours of sleep a night. When he has an anxious day, he may have trouble getting to sleep and will be given melatonin.

Family history is positive for migraines, anxiety, Post Traumatic Stress Disorder, hypertension, hyperlipidemia, depression, heart disease, diabetes, and cancer.

Psychological history is extensive. He has been with current psychologist for over a year, Dr.; however there was a large gap in services around December while Dr was reportedly 'setting up new office.'. He was not ready and 'begged' mother for help at the age of 6 years parents wanted the therapist to have a relationship with teacher and therapist was not willing to do this; therefore, the family decided to go with someone else.

Educational/Behavioral History: He is in the before (Earobics three times a week) and after care program for reading and has basic skills instruction with a reading specialist. He has had large gaps in reading development over the years but mother reported that he has worked very hard to 'close the gaps.' She noted that learning phonics was very difficult for him but she feels he has improved.

Kindergarten - he performed well there and no reports of anxiety were noted by the teacher, even after the accident in September. In 1St grade,. He has demonstrated difficulty with reading from 1st through 3rd grades and is tutored before and after school in reading programs. He has a Section 504 Plan due to reported Anxiety and PTSD, although many of the accommodations appear to focus on inability to attend and difficulties in specific academic areas, i.e. literacy support, FM system, Earobics, and pre-teaching principles from home. In mother's deposition during the ongoing lawsuit, she noted that 'Because of one of diagnoses, he could have had an IEP if **I** had pursued that. I didn't feel the need to pursue that. He has everything that he needs in a 504 Plan and I am very comfortable with the plan. I'm comfortable it meets needs.' It is unclear what the diagnosis is that she is referring to as the 504 Plan noted Anxiety but some accommodations to not pertain to Anxiety.

Social/Family History: lives with family relationship is good. ' He has typical sibling relationships with brother and sister.

Behavior at home is described as tough, i.e. defiant, crying, intentionally annoying brother and sister. mother describes him as a 'shaken up soda bottle' where he will hold himself together at school and then when he gets home 'he blows.'

In terms of social functioning, he makes and keeps friends easily. He also has a `girlfriend.' enjoys playing sports. He plays sports and diving. He loves playing and being with friends. He loves to spend time with animals.

Behavioral Observations: presented for testing on time. He was appropriately groomed and attired. Rapport was established quickly and easily and was very verbal and outgoing with the examiner. was accompanied by attorney and mother for the evaluation but separated easily for the testing. Conversational speech was appropriate and fluency was adequate. No articulation problems were noted. demonstrated an appropriate sense of humor and responded to jokes well. overall attention was adequate for conversation; however, he required repetition of directions and significant prompting and reassurance to continue on during reading tasks. He used fingers to count during mathematics calculations and appeared unaware that he had

skipped random items until they were brought to attention. During a block construction task, demonstrated significant difficulty and noted that he did not understand the task well. In the afternoon, he was very fidgety, often placing hands in mouth and demonstrating overall poor perseverance. approach to a complex graphomotor task was not well planned, resulting in a poor copy of the original. was aware of address and phone number and was oriented to the day, date, and time of day. He was able to name the current president and generally identify a current news event. He did not demonstrate any anxiety or nervousness during the interview or testing.

During interview, noted that favorite subject was gym and least favorite subject was library. He reported that best friend enjoy video games and boxing together. When asked what kinds of things make him nervous, he first stated 'my mom said just be honest,' to which the examiner replied, 'yes, that sounds like a good approach,' which made him giggle. He stated that he is nervous when playing sports, he also is nervous of being hit again and of tractor trailers, and that he is nervous when big kids that he knows are being mean to friends do not back down. stated that he does not like school, especially tests and quizzes and noted that it is 'boring. '.' He reported that he feels people are always watching him and it is 'pretty nerve racking.' He reported siblings, saying that he gets along with them `ok.' Lastly, said that he enjoys watching You Tube and will watch Minecraft videos, wrestling moves.

Overall, appeared to put forth best effort. evaluation is considered to provide a valid estimate of current level of cognitive and behavioral functioning.

.RESULTS

Functions Assessed and Tests Administered

Background	**Visuospatial/Constructional**	Executive Functions/Processing Speed
Clinical Interview	**Arrows (WRAML-2)**	S troop
Intellectual Functioning	Beery Buktenica Visual Motor Integration Test	Coding (WISC-V)
Wechsler Intelligence Scale for Children-	Rey Osterreith Complex Figure	Symbol Search (WISC-V)
Fifth Edition (WISC-V)	**Attention/Processing Speed**	Inhibition (NEPSY-2)
Achievement	Finger Windows (WRAML-2)	Trail Making Test
Wechsler Individual Achievement Test-III	Digit Span (WISC-V)	Behavioral Rating Inventory of Executive
(WIAT-III)	List 1 and B (CVLT-C)	Functioning, Parent version (BRIEF), parent and
Language	d2 Test of Attention	teacher reports

Intellectual: General cognitive functioning was assessed using the Wechsler Intelligence Scale for Children-Fifth Edition (WISC-V). Full Scale IQ was in the Low Average range with a significant discrepancy observed between verbal and nonverbal functioning.

Specifically, he was able to define words with Average ability and use verbal abstract reasoning with Average ability.

In the area of nonverbal functioning, visual motor integration ability was in the Severely Impaired range and visual working memory was High Average. ability to use nonverbal abstract reasoning and pattern recognition was in the High Average range and ability to measure quantitative fluid reasoning and induction was Average. On a task measuring mental, non-motor construction ability, which requires visual and spatial reasoning, mental rotation, visual working memory, understanding part-whole relationships, and the ability to analyze and synthesize abstract visual stimuli, performance was Mildly Impaired.

Verbal immediate memory was in the Borderline Impaired range. Visual working memory and nonverbal working memory capacity was in the High Average range.

Simple psychomotor processing speed was Average. On another task of psychomotor processing speed with the addition of visual discrimination, performance was in the High Average range.

Composite Scores Summary

Scale	Composite Score	Percentile Rank
Verbal Comprehension (VCI)	89	23rd
Visual Spatial (VSI)	69	2nd
Fluid Reasoning (FRI)	103	58th
Working Memory (WMI)	100	50th
Processing Speed (PSI)	108	70th
Full Scale (FSIQ)	86	18th

Subtest Scores

Verbal Comprehension	Scaled Score*		Visual Spatial	Scaled Score*
Similarities	8		Block Design	3
Vocabulary	8		Visual Puzzles	6
Fluid Reasoning	**Scaled Score***		**Working Memory**	**Scaled Score***
Matrix Reasoning	13		**Digit** Span	7
Figure Weights	8		Picture Span	13
Processing Speed	**Scaled Score***			
Coding	10			
Symbol Search	13			

* Scaled Score 10 = 50 percentile

Academic: Early reading skills including rhyming, identification of beginning and ending sounds, and understanding of blends was in the Low Average range. 's reading comprehension ability, when the material was readily available for review, was in the Borderline Impaired range. Overall oral reading fluency was Average; however, accuracy during task was in the Moderately Impaired range.

In the area of mathematics, ability to solve mathematical computation problems was in the Average range. Mathematical reasoning ability was at the lowest end of the Average. 's fluency for addition and subtraction facts was Average and fluency for multiplication facts was Superior.

Spelling of single words was in the Average range. Sentence composition was Borderline Impaired. 's ability to build sentences was in the Borderline Impaired range and ability to properly combine sentences was in the Moderately Impaired range.

Subtest	Standard Score	Percentile
Early Reading Skills	86	18th
Reading Comprehension	84	14th
Oral Reading Fluency	103	58th
-Oral Reading Accuracy	74	4th
-Oral Reading Rate	104	61st
Word Reading	94	34th
Pseudoword	89	16th
Numerical Operations	109	73 rd.
Math Problem Solving	90	25th
Math Fluency — Addition	104	61st
Math Fluency — Subtraction	99	47th
Math Fluency-Multiplication	141	99.7th
Sentence Composition	82	12th
Spelling	98	45th

Language: Comprehension of instructions Low Average. Fluency, articulation, and content of conversation were appropriate. 's ability to express the meanings of words (oral expressive vocabulary) was in the Average range. On a phonemic word fluency task, 's performance was in the Average range. On a semantic fluency task, 's performance fell in the High Average range.

Visuospatial/Constructional: On a task measuring visual motor integration in which he had to copy single geometric figures of ever increasing difficulty, performance was in the Mildly Impaired range. On a more complex visual motor construction task, performance was in the Severely Impaired range. On another task of visual spatial integration with no motor component, performance was in the Average range.

Attention/Concentration: On a task of immediate nonverbal attention, 's performance was in the Mildly Impaired range. On a task of simple immediate auditory attention, he performed in the Borderline Impaired range. Verbal encoding was Average to Superior.

Was administered a task of sustained attention, accuracy during attention tasks, and overall consistency of work during attention tasks. overall attention speed based on amount of work completed was in the Average range. The qualitative aspect of work was in the Average range. quality of inhibitory control and divided attention was Average. consistency of work was in the Average range.

Learning and Memory: 's ability to recall a list immediately after presentation across five trials was in the High Average range. recall of the list after a brief delay with a distracter list was in the Average range. Cues did not help him improve performance. After a 20-minute delay, 's recall of the list was Superior. Cues did not help to improve performance, in fact performance fell to the Borderline Impaired range. Recognition and discrimination of words from the list was in the Average range.

Recall of short stories immediately after presentation and after a 25-minute activity filled delay was in the Average range for both trials.

Memory for children's faces immediately after presentation and after a 25 minute activity filled delay was in the Average range for both trials.

Memory of a complex figure he had copied immediately after presentation and after a 25-minute activity filled delay was in the Mildly Impaired range for both trials. Recognition of parts of the figure was in the Severely Impaired range.

Executive Functions: Executive functions are defined as those mental processes that enable a person to demonstrate independent, purposive, goal oriented behavior. Examples of executive functioning abilities include abstraction, reasoning, judgment, mental flexibility, higher-order attention skills, fluency of speech production, self-monitoring, planning and carrying out goal-directed behavior, organization, and initiation and motivation.

On a task requiring visual scanning, set shifting, and response maintenance, performed in the Severely Impaired range. On a trial of an easier task, requiring only visual scanning and speed, performance was in the Average range. On another task of simple psychomotor processing speed, performed in the Average range.

Simple naming was Moderately Impaired. performance on tasks of inhibition was Mildly Impaired. Mental set shifting was Average. Task monitoring was Borderline Impaired.

Completed a measure of mental flexibility, self-monitoring, and regulating interference of conflicting mental processes. ability to name the color of ink that color words were written in was Severely Impaired, signifying difficulty in maintaining task orientation while suppressing the urge to automatically read the word.

Personality/Mood: mother and teacher completed a rating measure of behavior and emotional issues facing young children. indicated *clinically significant* concern in the area

of attitude towards school. He indicate *at risk* concern in the areas of anxiety and hyperactivity.

Mother completed a parent version of the measure. She indicated *clinically significant* concern in the area of anxiety and *at risk* concern in the area of depression.

Teacher completed a teacher version of measure. She reported *clinically significant* concern in the area of anxiety.

Also completed the Millon Pre-Adolescent Clinical Inventory, a true/false test administered over the computer that measures a child's emerging psychological patterns. Validity scales indicated that completed measure without underreporting or overreporting problems. Psychological discomfort and interpersonal patterns indicated by responses included:

- Social dependency and strong need for attention and security from others. fear of being on own leads him to seek out interesting and popular peers. Despite attentional difficulties and anxieties, he acts socially gregarious and charming. He wants to be seen as charming, composed, and appealing to others. Social pleasantries may mask scholastic difficulties and troublesome emotions.
- He seeks harmony with others at the expense of own wishes and unsuccessfully attempts to retrain negative emotions and lack of control.
- He may value himself more in terms of relationships with others than own traits. He allies himself with others, especially authority figures and popular peers, in an attempt to bolster himself based on their competencies. When feeling rejected, he will seek approval and reassurance from others.
- Results of this measure indicated a mild anxiety condition that is evident in agitated and ill at ease state. Symptoms can be prompted by failure and discord between current functioning and expected functioning.
- Hyperactivity and other core features of ADHD are present and possibility adversely affecting ability to perform and achieve academically.
- He may attempt to draw attention to himself through immature and regressive behaviors, which should be avoided. He requires clear rules at home and school and should be provided frequent praise and reinforcement for following these rules.
- The anxiety indicated through responses can be normal for age and family should work to reduce conflict within the family and respond to anxieties with calm confidence, caring, and warmth.
- may be reluctant to admit to shortcomings and may be evasive and unwilling to face these shortcomings.

B. Using Courtroom technology to Display MRIs, CT Scans and X-Rays and medical records;

Current Symptoms and Behavioral Observations:

She appeared generally in accord with her stated age, was appropriately and neatly dressed, and was adequately groomed. She wore glasses. She sat with a pillow because of reported back pain. Gait and posture were both otherwise normal as was motor behavior. Eye contact was appropriate. Her speech was fluent and clear with adequate expressive and receptive language functions with no evidence of any word finding. Thought processes were coherent and goal-directed with no evidence of hallucinations, delusions, or paranoia in the evaluation setting. Her affect was full but she described feeling a little bit anxious.

Upon further review of her current psychological status, Claimant stated feeling dysphoric and sad most days with some worsening of depression in the evening time. She stated she cries easily and is fatigued with a loss of energy nearly every day. She stated she is having a sleep study in the very near future to examine her sleeping patterns. She stated feelings of hopelessness and feels that things are all downhill as she described it. She stated feeling as if everything was a chore due to her physical issues. She stated her appetite has been stable. She noted excessive worry and the tendency to continually think about various topics. There was, however, no evidence of any racing thoughts. There was no evidence of any panic episodes or mania. There was no evidence of any disturbance in thought processes such as hallucinations and/or delusions. She stated she writes things down to recall appointments and other important information.

In terms Claimants of activities of daily living, she is reportedly physically limited and has trouble using her arms in certain positions. She can nevertheless, dress, bathe, and groom herself independently, can cook and prepare meals, do some general cleaning and laundry; shop but her husband maintains her finances. She can drive. In terms of socialization, she has friends and was reportedly close with her father, and has an improved relationship with a sister over the past few years. She enjoys spending time with her family.

Evaluation Procedures:

As part of this examination, Claimant was administered the following measures: Neuropsychological Assessment Battery (NAB); Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV); Symptom Checklist-90-R (SCL-90-R); and Test of Memory and Malingering (TOMM).

Summary of Findings:

Validity Indicator:
Claimant appeared to be putting forth adequate effort in the evaluation. On formal measures of symptom validity and potential for symptom magnification, Claimant obtained

a perfect 50/50 on Trial One of the Test of Memory and Malingering (TOMM) and Trial Two was also performed without incident or error.

Intellectual Functions:
Claimant was administered the Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV) which revealed the following:

Verbal Comprehension Subtest	**Scaled Score**	**Perceptual Reasoning Subtest**	**Scaled Score**
Similarities	6	Block Design	**11**
Vocabulary	7	Matrix Reasoning	10
Information	6	Visual Puzzles	9

Working Memory Subtest	**Scaled Score**	**Processing Speed Subtest**	**Scaled Score**
Digit Span	8	Symbol Search	11
Arithmetic	6	Coding	5

Index	**Index/10 Score**
Verbal Comprehension	80
Perceptual Reasoning	100
Working Memory	83
Processing Speed	89
Full Scale IQ	85

Overall, Claimant' performances on the WAIS-IV revealed a general level of intellectual functioning which placed her within the low average range relative to those her age and relatively consistent with her reported educational achievements as she stated. Her verbal reasoning skills were noted to be at the lower limits of the low average range with borderline general fund of knowledge and low average expressive vocabulary skills. Examination of her performance in other areas revealed average auditory-verbal attention span with her performance on the Digit Span Subtest falling in the average range. She did evidence a relative strength in terms of her visuospatial processes relative to her verbal reasoning skills with her overall composite score on the Perceptual Reasoning Index falling in the average range.

Neuropsychological Functioning:
As part of this evaluation, Claimant was administered the Neuropsychological Assessment Battery (NAB) which is a composite battery comprised of five composite scores and one overall score of neuropsychological functioning. Claimant' performances are as follows:

Module Index	Standard Score	Percentile Rank
Attention	74	4th
Language	104	61st
Memory	97	42nd
Spatial	117	87th
Executive Functions	95	37th
Total NAB Index	96	37th

As can be demonstrated from the performances above, Claimant demonstrated average overall neuropsychological functioning with again the relative strength in terms of her visuospatial processes relative to other areas of functioning as was also similarly demonstrated on the Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV). Claimant did evidence a relative weakness in terms of her overall attention with some mild difficulty being evidenced in terms of speed in which she is able to process visual information. She did not, however, demonstrate a tendency to be distracted or difficulties with attention on an everyday attention task such as the Driving Scenes Subtest of the Attention Module.

Psychological Functions:
Claimant was administered the Symptom Checklist-90-R (SCL-90-R) which is a ninety item self-report measure of psychological distress. On that measure, she revealed evidence of depression with also evidence of anxiety. Symptoms indicative of depression including awakening in the early morning, having disturbed sleep, and crying easily. There was no evidence of any disturbance in thought processes such as hallucinations and/or delusions evidenced in her self-report.

Impressions and Opinions:

Based upon review of the available medical records, Claimant is considered to have sustained a concussion as a result of the accident in which she was involved, however, at this point in time there is insufficient evidence to support a persistent post concussive syndrome or any permanent traumatic brain injury. Claimant related that she has an approximate Grade education and acknowledged also some difficulties in her educational abilities, however, no academic records were provided for review to confirm and add greater confidence to her premorbid level of functioning. Clamant Doctor's report did note Claimant to be reading at about a th grade level and performing mathematics at about a ## grade level, which is consistent with her related approximate level of education.

Nevertheless, Claimant did reportedly work subsequent to this accident and based upon the current evaluation again, there was insufficient evidence, within a reasonable degree of neuropsychological certainty, to support the notion of a persistent post-concussion syndrome or permanent brain injury. There was also no evidence of any post-traumatic stress disorder or psychiatric disorder that could be reasonable attributed to the motor vehicle accident

Based on current data and this examination, there is insufficient evidence to support a permanent injury associated with this accident with respect to her neuropsychological functioning.

There are significant issues with the conclusions being drawn in Claimant Doctor's evaluation as noted in the record reviewed section of this report.

Should there be any questions or concerns regarding this evaluation report, please do not hesitate to contact this office.

Bio-mechanical experts:

EXEMPLAR REPORT NO. 3 – BIOMECHANICAL ASSESSMENT

Biomechanical Analysis

The incident was evaluated from a biomechanical engineering perspective to assess the motions and loads experienced by Claimant during the accident, and to determine whether the subject incident could be related to his cervical spine, thoracic spine, lumbar spine, right shoulder, and wrist pathologies. This evaluation first involved a scientific assessment of the collision. The analysis was based upon the materials provided regarding this specific collision (as listed at the beginning of this report), the laws of physics, engineering knowledge, and understanding of the mechanical deformation of vehicle structures. The collision was then examined in the context of what has been learned from crash tests (involving instrumented dummies and cadavers), from biomechanical studies of human tissue mechanics and tolerance to forces, and biomechanical models of the human body. The evaluation also involved a detailed review of Claimant's medical records.

Damage occurs during sideswipe collisions due to changes in the relative motion of the vehicles during their interaction, including changes in motion due to braking or acceleration. Damage may also occur following initial contact during disengagement of the vehicles. The patterns of damage to the vehicles are consistent with a sideswipe interaction between the two vehicles during Claimant's left turn, where the occupant compartment of the Claimant's vehicle moved to the right as a result of the impact with the front left corner of the Other vehicle. The forward motion of the occupant compartment was also slowed by impact forces. Given the mechanical properties of the side structures, the maximum lateral (left-to-right) force to the side of the vehicle can be conservatively bounded as less than approximately 3,000 pounds. This force would cause the occupant compartment to move on the vehicle's suspension, and may have caused the tires to slide on the roadway.

For sideswipe interactions, vehicle acceleration is the most effective indicator of the severity of the collision for the vehicle occupants. Published studies of vehicle testing for

similar impact configurations indicate that the longitudinal and lateral accelerations of the impacted vehicle can be characterized as disturbances that last on the order of one or more seconds with brief acceleration peaks due to possible snagging of the vehicle's body components. The accelerations experienced by occupants in sideswipe collisions are typically low due to the prolonged duration of the impact pulse. The lateral (side-to-side) accelerations experienced by the occupant compartment as a result of the impact and during subsequent motion of compartment on its suspension were less than two times the acceleration due to gravity, or 2g. Frictional forces between the two vehicles also tended to move the occupant compartment of the vehicle rearward, and may have also moved the tires relative to the roadway. The longitudinal (fore-aft) acceleration from these frictional forces and any acceleration or braking of the vehicle can be bounded as less than approximately 2g.

As collision forces move a vehicle, the occupants initially continue to move in their original direction at their original speed as the vehicle moves around them. The discrepancy between the velocity of the vehicle and the velocity of the occupants results in movement of the occupants relative to the vehicle interior. This movement continues until it is arrested via bracing, friction between the occupant's body and the seat, interaction with the restraints, and/or contact with interior vehicle structures. Based on the laws of physics, Claimant's body initially moved to his left relative to the interior of the vehicle as the vehicle moved to the right underneath him. He would experience additional side-to-side motion as the occupant compartment rocked on the vehicle's suspension, and he may have also moved forward relative to the vehicle. His motion relative to the vehicle would have been limited and ultimately halted by bracing and friction between his body and the seat and contact with his restraint system. The left side of his body may have contacted vehicle structures to his left. His leftward motion occurred at speeds comparable to or less than typical walking speeds. Claimant may have experienced additional motions as he returned to his initial seated position and as the occupant compartment continued to move on its suspension. These motions would be at lower speeds than his initial motions and would be arrested by friction, bracing, and/or contact with vehicle structures. Due to the low severity of the collision, Claimant experienced limited movement with respect to the vehicle's interior.

Crash testing has been performed using anthropomorphic test devices (ATDs, also known as crash test dummies), cadavers, and human volunteers to determine the motions, accelerations, and forces acting on occupants during frontal and lateral collisions. These tests utilized instrumented vehicles and instrumented occupants to measure the loads and accelerations acting on the occupants and used high-speed video to record occupant motion. Tests have been performed at accelerations comparable to those experienced by Claimant's vehicle during the subject incident. The results of these experiments demonstrate that the loads acting on the spine during these impacts are substantially lower than the thresholds for damage to the bones, ligaments, and discs of the spine, as reported in the biomechanical literature. The subject incident provided no mechanism for motion within his cervical, thoracic, and lumbar spine to exceed their physiological range. The loads acting on his thoracic and lumbar spine during the subject incident were less than those he experienced during everyday activities, such as bending and lifting. The accelerations of his head were less than those he experienced during daily activities. The

loads acting on his cervical spine were comparable to those experienced during vigorous activities and while riding bumper cars. The subject incident provided no mechanism for cervical, thoracic or lumbar spinal injury, with the exception of transient strain or sprain, nor a mechanism for exacerbation of any existing cervical, thoracic, or lumbosacral spinal pathology more than daily activities.

Claimant's medical records include diagnoses of disc herniations, protrusions, and bulges in his spine. Biomechanical studies have shown that within the physiologic range of motion and in the absence of damage to adjacent bony structures, disc herniations, protrusions, and bulges do not occur as a result of individual loading events. The available medical information does not contain any reports of acute bony damage to Claimant's spine. Within physiologically reasonable ranges of motion of the spine, disc bulges, protrusions, and herniations without adjacent bony damage have been produced experimentally only through repetitive compressive loading for thousands of cycles, through what is known in engineering terms as a fatigue process. Based on the biomechanical incident analysis presented above, within a reasonable degree of scientific certainty, the subject incident provided no mechanism for Claimant's disc pathologies, with the exception of transient strain. It is noteworthy that research studies of asymptomatic volunteers have observed cervical and lumbar disc abnormalities in a substantial fraction of people without neck or back pain.

Claimant's medical records immediately after the subject incident included an MRI study of his right shoulder that noted fluid in the subacromial and subdeltoid bursa, apparent supraspinatus tendonitis or tendinosis without evidence of a tear, and intraosseous marrow edema consistent with a bone contusion without evidence of fracture or impaction injury. A second study performed nearly a year later found changes to the acromioclavicular joint that encroached on to the supraspinatus, fluid in the subacromial/subdeltoid bursa compatible with impingement, a partial thickness tear of the supraspinatus tendon, and bone marrow changes compatible with contusion. An MRI study of his left shoulder was interpreted to be "unremarkable. “The rotator cuff is a fibrous structure that surrounds the head of the humerus, comprised of the conjoined tendons of four muscles (supraspinatus, infraspinatus, subscapularis, and teres minor) that originate on the scapula and insert on the humeral head. The rotator cuff aids in providing the shoulder with the balance of mobility and stability required for the execution of daily activities.

The shoulder joint is arranged such that the rotator cuff lies beneath a bony structure called the coracoacromial arch, and a fluid-filled bursa is interposed between the bony arch and the rotator cuff Most rotator cuff problems involve specifically the supraspinatus part of the tendon located inferior to the acromioclavicular joint. All movements of the shoulder, but especially overhead movements, compress the rotator cuff tendon against the coracoacromial arch. Impingement syndrome is due most often to repetitive trauma caused by vigorous occupational or athletic endeavors and/or degenerative bony growth projecting outward from the surface of the bone. Repeated loading can result in rotator cuff pathology, including supraspinatus tendinopathy, rotator cuff tears, and impingement. Experimental efforts to forcefully produce rotator cuff pathologies through a single force application do

not result in failure of the tendon; rather, these efforts result in failure of the supraspinatus muscle belly or the bony tissue of the humerus or scapula. During the subject collision, Claimant moved leftward relative to his vehicle. Any contact between his left shoulder and vehicle structures to his left occurred at speeds comparable to typical walking speeds. The impact provided no mechanism for his right shoulder to contact any vehicle structures, other than contacting the padded seatback as he returned to his original position after moving leftward. The subject collision did not provide a mechanism to acutely injure Claimant's right or left shoulder. It is noteworthy that no rotator cuff tear was observed in the MRI study of his right shoulder performed shortly after the subject incident.

To quantify the type and severity of injury experienced by occupants in motor vehicle accidents, the American Medical Association, the Association for the Advancement of Automotive Medicine and the Society of Automotive Engineers developed the Abbreviated Injury Scale (AIS). AIS scores range from 0 (no injury) to 6 (maximum, usually fatal). The forces acting on Claimant during the subject accident would be expected to produce, at most, transient strain or sprain (AIS = 1).

The foregoing quantitative analysis can also be interpreted in the context of published volunteer exposures to frontal, lateral, and sideswipe crash tests. These tests have been conducted to study human response during frontal, lateral, and sideswipe collisions. Results of these studies are consistent with and supportive of quantitative biomechanical analyses, such as the one presented above, which use anthropomorphic dummy testing and injury tolerance studies. Studies using human volunteers in sled tests and vehicle-to-vehicle crash tests have been performed by various investigators to look into such issues as occupant kinematics, effectiveness of restraints, and injury potential. A review of published research shows that many research institutions from several different countries have performed volunteer test exposures to frontal collisions, many of which were of comparable or greater severity than the impact experienced by the vehicle in the subject incident. Tests involving volunteer exposures to lateral and sideswipe tests have also been performed. In tests with accelerations comparable to those Claimant experienced during the subject sideswipe discussed above, while the majority of volunteers had no complaints after testing, some volunteers complained of, at most, transient soreness, stiffness, bruising, or headache. None of the volunteers in these tests experienced bony, tendon, or ligamentous injury, or neural compromise.

In summary and within a reasonable degree of certainty, Claimant's cervical spine, thoracic spine, lumbar spine, carpal tunnel syndrome, and shoulder pathologies, with the exception of transient strain, cannot reasonably be attributed to the accident. The subject incident provided no mechanism for a serious head injury. The opinions in this report, based upon the materials reviewed and the education, experience, and knowledge of the author, are presented with a reasonable degree of biomechanical and scientific certainty.

NEUROPSYCHOLOGIC TESTING AND THUMBNAILS OF THEIR PURPOSE

Test Name	Purpose of Test
Ammons Quick Test	This test has been used for many years to help assess premorbid intelligence. It is a passive response picture-vocabulary test.
Aphasia Tests (various)	Several aphasia and language tests examine level of competency in receptive and expressive language skills. (e.g., Reitan-Indiana Aphasia Screening Test)
Beck Depression or Anxiety Scales	These scales provide quick assessment of subjective experience of symptoms related to depression or anxiety.
Bender Visual Motor Gestalt Test	This test evaluates visual-perceptual and visual-motor functioning, yielding possible signs of brain dysfunction, emotional problems, and developmental maturity.
Boston Diagnostic Aphasia Examination	Broad diagnosis of language impairment in adults.
Boston Naming Test	Assessing the ability to name pictures of objects through spontaneous responses and need for various types of cueing. Inferences can be drawn regarding language facility and possible localization of cerebral damage.
California Verbal Learning Test	This procedure examines several aspects of verbal learning, organization, and memory. Forms for adults and children.
Cognitive Symptom Checklists	Self-evaluation of areas of cognitive impairment for adolescents and adults.
Continuous Performance Test	Tests that require intense attention to a visual-motor task are used in assessing sustained attention and freedom from distractibility. (e.g., Vigil; Connors Continuous Performance Test)
Controlled Oral Word Association Test	Different forms of this procedure exist. Most frequently used for assessing verbal fluency and the ease with which a person can think of words that begin with a specific letter.
Cognistat (The Neurobehavioral Cognitive Status Examination)	This screening test examines language, memory, arithmetic, attention, judgment, and reasoning. It is typically used in screening individuals who cannot tolerate more complicated or lengthier neuropsychological tests.

d2 Test of Attention	This procedure measures selective attention and mental concentration.
Delis-Kaplan Executive Function System	Assesses key areas of executive function (problem-solving, thinking flexibility, fluency, planning, deductive reasoning) in both spatial and verbal modalities, normed for ages 8-89.
Dementia Rating Scale	Provides measurement of attention, initiation, construction, conceptualization, and memory to assess cognitive status in older adults with cortical impairment.
Digit Vigilance Test	A commonly used test of attention, alertness, and mental processing capacity using a rapid visual tracking task.
Figural Fluency Test	Different forms of this procedure exist, evaluating nonverbal mental flexibility. Often compared with tests of verbal fluency.
Finger Tapping (Oscillation) Test	This procedure measures motor speed. By examining performance on both sides of the body, inferences may be drawn regarding possible lateral brain damage.
Grooved Pegboard	This procedure measures performance speed in a fine motor task. By examining both sides of the body, inferences may be drawn regarding possible lateral brain damage.
Halstead Category Test	This test measures concept learning. It examines flexibility of thinking and openness to learning. It is considered a good measure of overall brain function. Various forms of this test exist.
Halstead-Reitan Neuropsychological Battery	A set of tests that examines language, attention, motor speed, abstract thinking, memory, and spatial reasoning is often used to produce an overall assessment of brain function. Some neuropsychologists use some or all of the original set of tests in this battery.
Hooper Visual Organization Test	This procedure examines ability to visually integrate information into whole perceptions. It is a sensitive measure of moderate to severe brain injury.
Kaplan Baycrest Neurocognitive Assessment	Assesses cognitive abilities in adults, including attention, memory, verbal fluency, spatial processing, and reasoning/conceptual shifting.
Kaufman Functional Academic Skills Test	A brief, individually administered test designed to determine performance in reading and mathematics as applied to daily life situations.

Kaufman Short Neuropsychological Assessment	Measures broad cognitive functions in adolescents and adults with mental retardation or dementia.
Luria-Nebraska Neuropsychological Battery	This is a set of several tests designed to cover a broad range of functional domains and to provide a pattern analyses of strengths and weakness across areas of brain function. The tests reflect a quantitative model of A. R. Luria's qualitative assessment scheme.
MMPI-2 (Minnesota Multiphasic Personality Inventory)	This well-known and well-respected personality assessment is often used to accompany neuropsychological tests to assess personality and emotional status that might lend understanding to reactions to neurofunctional impairment.
Memory Assessment Scales	This is a comprehensive battery of tests assessing short-term, verbal, and visual memory.
MicroCog	This computerized assessment measures nine functional cognitive areas sensitive to brain injury
Millon Clinical Multiaxial Inventory	A self-report assessment of personality disorders and clinical syndromes. This is sometimes used as an adjunct instrument in comprehensive neuropsychological assessment.
Mooney Problem Checklist	This instrument helps individuals express their personal problems. It covers health and physical development; home and family; morals and religion; courtship, sex, and marriage.
Multilingual Aphasia Examination	This set of subtests provides comprehensive assessment of a wide range of language disorders.
North American Reading Test	This reading test is often used to help assess premorbid intelligence, for comparison with current intelligence as measured by more comprehensive tests.
Quick Neurological Screening Test	This is a rapid assessment to identify possible neurological signs, primarily in motor, sensory, and perceptual areas.
Paced Auditory Serial Attention Test	Tests for attention deficits including concentration, speed of processing, mental calculation, and mental tracking. Sensitive for diagnosing cognitive impairment in individuals 16 and up.
Paulhus Deception Scales	This instrument measures the tendency to give socially desirable responses, useful for identifying individuals who distort their responses.

Personality Adjective Checklist	This self-report measure evaluate several personality patterns, primarily focusing on personality disorders
Rey Auditory Verbal Learning Test	This procedure evaluates the ability to learn word lists. It is the forerunner of other tests of verbal learning using lists of words.
Rey Complex Figure Test	This drawing and visual memory test examines ability to construct a complex figure and remember it for later recall. It measures memory as well as visual-motor organization.
Rey 15-item Memory Test	This test is used to evaluate potential for malingering in memory.
Rey-Osterrieth Complex Figure Test	Analyzes aspects of visuospatial ability and memory in all ages.
Rivermead Behavioural Memory Test	Evaluates impairments in everyday memory related to real life situations.
Rogers Criminal Responsibility Scale	This instrument is designed to assess the impairment of an individual at the time a crime was committed.
Rorschach Projective Technique	This familiar inkblot test is used to evaluate complex psychological dynamics. Persons with brain injury have been shown to produce certain kinds of responses that can complement other tests and help to understand personality changes associated with brain injury.
Ruff Figural Fluency Test	This visual procedure complements verbal fluency tests in assessing ability to think flexibly but using visual stimuli rather than words.
Sensory Screening Test	Various procedures include the assessment of tactile sensitivity to various objects, the ability to recognize objects by touch, and the ability to detect numbers written on the hands by touch alone. By examining both sides of the body, inferences may be drawn regarding possible lateral brain damage.
SCL-90 (Symptom Checklist 90)	This checklist evaluates the individual's subjective complaints.
Shipley Institute of Living Scale	Comparison of vocabulary knowledge and ability to figure out abstract sequential patterns has been established as a sensitive measure of general brain functioning.

Stroop Test	This brief procedure examines attention, mental speed, and mental control.
Symbol Digit Modalities Test	Screening test for children and adults to detect cognitive impairment.
Tactual Performance Test	Assesses speed of motor performance, tactile perception, spatial problem-solving, and spatial memory in all ages.
Test of Memory Malingering	This test is used to evaluate potential for malingering in memory.
Test of Memory and Learning (TOMAL)	This test for children and adolescents measures numerous aspects of memory, assessing learning, attention, and recall.
Test of Memory Malingering	For ages 16-84, this visual recognition test helps discriminate malingered from true memory impairments.
Thematic Apperception Test	This projective test is most commonly used to examine personality characteristics that may aid in understanding psychological or emotional adjustment to brain injury.
Tower of London	A test for all ages, assessing higher-level problem-solving, valuable for examining executive functions and strategy planning.
Trail Making Tests A and B	These tests measure attention, visual searching, mental processing speed, and the ability to mentally control simultaneous stimulus patterns. These tests are sensitive to global brain status but are not too sensitive to minor brain injuries.
Verbal (Word) Fluency Tests (various)	There are a variety of verbal fluency tests in use. Each is designed to measure the speed and flexibility of verbal thought processes. (e.g., Controlled Oral Word Association Test; Thurstone Verbal Fluency)
Wechsler Adult Intelligence ScaleIII	This set of 13 separate "subtests" produces measures of memory, knowledge, problem solving, calculation, abstract thinking, spatial orientation, planning, and speed of mental processing. In addition to summary measures of intelligence, performance on each subtest yields implications for different neurofunctional domains. The set of tests takes about an hour or more to administer. The WAIS-III is often the foundation for a comprehensive neuropsychological assessment.
Wechsler Intelligence Scale for ChildrenIII	Comparable to the Wechsler Adult Intelligence Scale, this procedure contains subtests that measure similar domains in children.

Wechsler Memory ScaleIII	This set of 18 separate "subtests" yields information about various kinds of memory and learning processes. Summary memory indices are provided in addition to the individual scores of the subtests. The whole set of tests takes about an hour to administer. The WMS-III provides a comprehensive assessment of memory. It is co-normed with the WAIS-III and is usually used in conjunction with it.
Wechsler Test of Adult Reading	Provides estimate of pre-morbid intellectual functioning in persons 18-89, normed with the WAIS-III and WMS-III.
Wide Range Achievement Test	Provides level of performance in reading, spelling, and written arithmetic. The reading and spelling tests are often used in estimating premorbid intellectual functioning.
Wisconsin Card Sort Test	Similar in concept to the Category Test, this procedure also measures the ability to learn concepts. It is considered a good measure of frontal lobe functioning.
Wonderlic Personnel Test	This personnel test is not a neuropsychological instrument per se, but is used to help evaluate vocational abilities and potential for comparison with other neuropsychological tests in making practical prognostic decisions.

BATES NUMBER	DATE	DESCRIPTION	·...TOPIC
5072-200 to 201		Admission Note: Consult of Abdominal Mass	Abdomen
5028-026 to 025		Doctor: c/o worsening asthma symptoms and heartburn	Asthma
5027-105		Doctor: c/o LBP after falling backwards on stairs while having sex with wife; RX Anaprox and Flexeril for LBP; she also prescribed Tylenol #3 in case the other drugs don't work.	Back
5027-104		Doctor: c/o LBP for past 2 day with no precipitating factor; has a h/o of acute severe low back strain; he is not allowed to return to work or operate any machinery due to drowiness	Back
5027-094		Doctor: c/o severe LBP after closing a hangar door at work on 9/26/03; DX: acute lumbosacral s/s with somatic dysfunction and radicular symptoms into left leg	Back
5027-091 to 094 *out of order*		Doctor: (3 month duration) c/o LBP	Back
5027-091		Doctor: cont'd c/o LBP with recent exacerbation of pain; currently taking Skelaxin and Perocet; MRI was ordered	Back
5027-093		Doctor: "There is no way he is readfy to go back to work in the amount of discomfort he is in"; RX: Percocet, Skelaxin and Medrol Dose Pak	Back
5055-017		PT: c/o pain/ tightness in lower back, numbness and decreased muscle strength in the left lower extremity	Back
5027-092		Doctor: "He hasn't been able to do any physical work whatsoever. He has been out of work for 6 weeks. He tried to do some simply wiring of some speakers at home and 2 days later the back pain came back with a vengeance, and hasn't gone away since."	Back
5028-019		Doctor: Recently completed a full course of lumbar ESI for LBP and L4-5 disc herniation which provided some relief but LBP is back to baseline	Back
5083-032		Doctor: c/o LBP radiating into left leg; had already undergone 4 ESIs with mild improvement	Back
5083-031		Doctor: cont'd c/o LBP radiating into left leg; has to leave work at times, RX: Percocet, Skelaxin, Mobic, possible surgery	Back
5083-030		Doctor: cont'd c/o LBP radiating into left leg	Back
5083-053		MRI of L-spine: mild increase in central L4-5 disc herniation when compared to prior study	Back
5083-028		Doctor: cont'd c/o LBP and left leg discomfort; going to have his 1st ESI	Back
5010-030		Surgical Center: left L4-5 ESI	Back
5083-027		Doctor: had some relief from 1st ESI and 2nd ESI was scheduled. Report referenced that "Patient"had the double the workload of typical human beings and works 90 hour weeks.	Back
5059-135		Doctor: left lumbar facet joint block/ median branch block of L1-2 to L5-S1 adminsitered at today's visit	Back
5083-025 to 026		Doctor: Significant physical limitations related to pain. Recommended myelogram due to the failure of 6 prior ESIs. Surgery may be an option.	Back
5070-005		Lumbar myelogram with CT: disc herniation at L4-5 (injection given)	Back
5083-023		Doctor: reviewed myleogram which showed some mild stenosis on the left side at L4-5 and also on the right	Back
5000-061		Hospital: L4-5 microdiscectomy	Back
5027-087		Doctor: 1 month post-op from lumbar laminectomy which provided pain relief for a few weeks but now has recurrent pain on the left side; refers to anxiety and fear of getting lung cancer to the point it is keeping him up at night	Back
5083-019		Doctor: had 3-4 weeks of pain relief but has recurred in the buttocks with radiation down the leg.	Back
5097-072 to 073		Rehab: Work Hardening Eval states his last full day of full duty was (date)	Back
5065-285		Rehab: Discharge	Back
5097-062 to 071		FCE: Last worked on (date) following an injury on (date); recommended for medium duty	Back
5083-017 to 010		Doctor: (8 month duration) Pain and limitations due to LBP and B/L lower extremity radiculopathies. Reference to cognitive dysfunctions due to usage of Lyrics. Recently had epidural injections	Back
5083-017		Doctor: could to return to regular duty (medium)	Back
5083-016		Doctor: cleared to return to regular duty (medium)	Back
5083-011		Doctor: cont'd c/o LBP and left leg pain; already undergone 2 ESIs; prescribed Vicodin	Back
5065-287 to 290		IME: c/o back and left leg pain post discectomy and PT	Back
5082-072		Doctor: c/o neck discomfort with radiation into left upper extremity; referred for cervical ESI	Back
5059-137		Doctor: L5-51 transforaminal ESI administered	Back
5059-138		Doctor: c/o deep dull pain in lower back with occasional referral to left hip region; left L5-S1 lumbar facet joint injection adminsitered at today's visit	Back
5059-259		Doctor: ESI at L3-4	Back
5059-260		Doctor: ESI at L3-4	Back
5059-262		Doctor: Lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and L5-S1	Back
5065-139		Doctor: Lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and L5-S1	Back
5072-024 to 025		Hospital: Surgery- 1st stage decompressive neuroplasty targeting left L5 nerve root sDoctorve, myelogram	Back
5072-053 to 054		Hospital: Surgery- 2nd stage decompressive neuroplasty targeting left L5 nerve root sDoctorve, myelogram	Back
5059-271		Doctor: Lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and L5-51	Back

5010-016		Surgical Center (pain eval): DX lumbar postDoctorinectomy syndrome, lumbar radiculopathy, lumbar degenerative disc disease	Back
5059-273		Doctor: Lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and L5-51	Back
5059-274		Doctor: Lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and L5-S1	Back

059-275		Doctor: Lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and L5-51	Back
5059-144		Doctor: "insisiting on continue working at his job but he is suffering so much with lifting, carrying, bending, twisting working as an aircraft mechanic."; Lumbar facet joint injections at L1-2, L2-3, L3-4, L45 and L5-51	Back
5059-277		Doctor: Lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and L5-S1	Back
5059-278		Doctor: Lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and L5-S1	Back
5059-279		Doctor: Lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and L5-51	Back
5059-280		Doctor: Lumbar facet joint injections at L1-2, L2-3, 13-4, L4-5 and 13-S1	Back
5059-281		Doctor: Lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and L5-51	Back
5065-100 to 101		Doctor: "Patient"wants to increase his level of activity at work but is having difficulty. DX: Exacerbation of SI joint pathology which is a common region for referred back pain. TX: ESI into SI joint administered. Current RX: Duragesic patch, Vicodin, Baclofen.	Back
5027-072		Doctor: chronic pain being treated with Fentantyl patch and Baclofen	Back
5065-103		Doctor: "constant and sickening" pain; chronic pain syndrome; left lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and L5-51	Back
5072-083 to 084		Hospital: Surgery- 3rd stage decompression caudal neurolysis, myelogram	Back
5065-104 to 105		Doctor: Left lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and 1.5-51	Back
5065-107		Doctor: Left lumbar facet joint injections at L1-2, L2-3, L3-4, L4-5 and 1.5-51	Back
5065-112		Doctor: Sacroiliac joint injections (5 sites)	Back
5065-113		Doctor: Right lumbar median branch blocks at L2, L3, L4, L5, S1	Back
5097-054 to 055		Doctor: Lumbar facet joint injections	Back
5065-319 to 325		IME: c/o persistent back pain	Back
5065-005		Doctor: c/o pain is "throbbing and pulsing"; increased dull LBP; pain referred to thigh and hip region; right lumbar facet blocks from L1-2 to L5-51	Back
5065-006		Doctor: left intraarticular lumbar facet joint block L1-2 to L5-51	Back
5059-012		Doctor: c/o problems with lifting, carrying, and (rest if cut off); Left lumbar facet joint injections L1-2 to 13-S1	Back
5059-014		Doctor: dio increased dull LBP; Right facet joint injections at L1-2 to L5-51	Back
5059-015		Doctor: Left lumbar intrajoint facet injections L1-2 to L5-51	Back
5059-016		Doctor: cognitive changes in the last 1-2 months; problems with concentration and memory thought to be the result of pain meds; Right cervical facet joint injections C2-3 to 5-7	Back
5059-019		Doctor: c/o radicular pain worsening; Left L5-51 transforaminal epidural injection	Back
5059-020		Doctor: Difficulties ambulating due to SI pain; Sacroiliac joint injections on the right (5 sites)	Back
5065-313 to 318		IME: c/o back pain with radiation into left leg; thought to be at MMI	Back
5059-022		Doctor: Right lumbar facet joint blocks at L3-4, L4-5, and L5-51	Back
5059-023		Doctor: Right lumbar facet joint blocks at L3-4, L4-5, and 1.3-51	Back
5059-024		Doctor: c/o LBP with radiation to B/L hip areas; B/L sacroiliac joint injections	Back
5059-025		Doctor: c/o intermittent throbbing LBP; Left lumbar facet joint blocks at L3-4, L4-5, and 13-S1	Back
5059-027		Doctor: increased numbness in the left leg; Left transforaminal epidural injections at L4, L5, S1	Back
5059-028		Doctor: increased numbness in the left leg with cold weather; Left transforaminal epidural injections at L4,13, S1	Back
5059-029		Doctor: Left facet joint blocks at L3-4, L4-5, L5-51	Back
5059-030		Doctor: Right facet joint blocks at L3-4, L4-5, L5-S1	Back
5059-031		Doctor: Left facet joint blocks at L3-4, L4-5,13-51	Back
5098-006		Doctor: he is doing well, neuro intact and taking pain meds for back	Back
5059-033		Doctor: Right facet joint blocks at L3-4, L4-5,1_5-51	Back
5059-035		Doctor: "I do not believe that he can return to work as a mechanic for aircraft industry"; Left facet joint blocks at L3-4, L4-5, L5-51	Back
5059-036		Doctor: Inability to lift/carry more that 5-7Ibs.; inability to sit in one position for more than 15mins; Sacroiliac joint injections administered	Back
5038-075		Doctor: "seen as an emergency" for back pain. Lumbar facet joint blocks adminstered at L3-4, L4-5, L5Si.	Back
5105-042 to 044		Doctor: report notes "he was on large doses of Percocet, Duragesic patch and Avinza, even though amounts of narcotic-containing medication did not produce significant improvement in his symptomology."	Back
5055-022		Doctor: Right facet joint blocks at L3-4, L4-5,13-51	Back
5055-024		Doctor: Left lumbar transforaminal injection at L5	Back
5055-023		Doctor: c/o deep achy pain across the back; Doctor: Right facet joint blocks at L3-4, L4-5,13-51	Back
5105-038		Doctor: c/o wrenching, throbbing pain in the leg, thigh, and buttocks; Left lumbar transforaminal injections at L5	Back

5105-037		Doctor: Right lumbar facet joint blocks	Back
5105-036		Doctor: Left lumbar facet joint blocks at L3-4, L4-5, L5-51	Back
5105-029		Doctor: lumbar facet joint blocks	Back
5065-305 to 312		IME: cont'd c/o back pain dating back to (date) WC injury; has not recovered from WC injury and was still treating same with narcotics and spine injections	Back
5065-295 to 304		IME: c/o mid lumbar pain DX: chronic back pain, long term use of narcotics for back pain; and TBI	Back
5065-326 to 333		Addendum Report: "It is not possible to assess the percentage of disability related to the back injury of (date) versus the multiple traumas of (date)."	Back
5059-018		Doctor: cognitive changes, problems with concentration and memory thought to be the result of pain meds; Right lumbar facet joint injections L1-2 to 13-S1	Back/ Psych

5059-018		Doctor: cognitive changes, problems with concentration and memory thought to be the result of pain meds; Right lumbar facet joint injections L1-2 to L5-51	Back/ Psych
5059-026		Doctor: noticed increase in cognitive changes with memory and concentration as a side effect from pain meds; Right lumbar facet joint blocks at L3-4, L4-5, and L5-S1	Back/ Psych
5059-021		Doctor: Difficulties with sDoctorping, ADLs, stairs, cognitive changes with memory and concentration; Left transforaminal epidural injection at L4, L5 and S1	Back/Psych
5028-120		MRI of L-spine: degenerative change with a small central disc herniation at L4-5 level.	Diagnostic
5097-046		MRI of L-spine: scarring at the L4-5 level which extends to the left epidural space and touches the descending left L5 nerve root	Diagnostic
5097-045		MRI of L-Spine: mild scarring at L4-5 on the left with no recurrent disc herniation or change from the prior study (5/18/05)	Diagnostic
5098-032 to 034		Diagnostic: Lumbar discography at L3-4, L4-5, L5-51; Impression: disc degeneration at L4-5 and more so at L5-S1 and mild central stenosis L4-5	Diagnostic
5081-078		CT of Head Impression: punctate intraparenchymal hemorrhage in the lateral aspect of the left cerebral peduncle; minimal dependent blood in both lateral ventricles; possible small subdural hematoma layering along the right tentorium	Diagnostic
5042-021 to 022		MRI of Brain Impression: susceptibility which results in signal heterogenity involving the right maxillofacial structures in the right anterior temporal lobe including signal heterogeneity on the diffusion sequence involving the right anterior frontal and temporal lobes; encephalomalacia and gliosis which appears to be related to previous shunt catheter tract in the right frontal lobe extending towards the right frontal horn; increased size of the ventricles out of proportion to the sulci with inhomogeneity of the sulci towards the vertex may represent diffuse volume loss; mild to moderate patchy opacification of the ethmoid air cells	Diagnostic
5027-068		Doctor: feeling well except for ED attributed to Lexapro	ED
5027-067		Doctor: prescribed Levitra from ED	ED
5096-019		Job: Email regarding "Employee"poor functioning; observed taking 20 minutes to fill out time card.	Employ
5096-018		Job: Disciplinary action for poor performance.	Employ
5096-020		Job: 2nd Disciplinary action for poor performance and functioning.	Employ
5033-005 to 016		Doctor: "presented with optic neuropathy OS as evidenced by relative afferent pupillary defect, visual field loss, asymmetric cupping, and possible opticdisc pallor OS."; possibly related to trauma	Eye
5028-027		Doctor: c/o intermittent swelling of right knee over the past year and a half; MRI indicated an effusion but nothing else.	Knee
5059-134		Doctor: responded well to the right cervical facet joint injections; left cervical facet joint injection adminsitered at today's visit	Neck
5098-020		Doctor: c/o having significant neck pain with radiation and numbness down left arm	Neck
5029-040		CT of C-spine: bilateral upper extremity radiculopathy; small central disc herniation at C4-5; large central disc herniation at C5-6; central disc herniation at C6-7; spondylotic changes at C5-6 and C6-7; loss of disc height at C5-6	Neck
5000-173 to 174		Hospital: Cervical diskectomy and cervical disc replacement	Neck
5098-010		Doctor: increasing neck pain with left thumb numbness	Neck
5029-034 to 037		Doctor: EMG/ NCV of upper extremity was normal	Neck
5097-009		Doctor: c/o neck pain, left paracentral pain, and shoulder pain on the left	Neck
5070-016		MRI of c-spine: limited MR exam due to fusion device at C5-6; postoperative changes status post anterior cervical fusion at the C5-6; cervical spondylosis resulting in mild spinal stenosis at C4-5 and C6-7	Neck
5098-007		Doctor: cont'd 00 neck pain and discussed getting a rhizotomy	Neck
5065-114		Doctor: Right cervical facet joint injections C1-2 to C6-7	Neck
5065-007		Doctor: Right cervical facet joint injections C2-3 to C6-7	Neck
5059-013		Doctor: Left cervical facet joint injections C1-2 to C6-7	Neck
5059-017		Doctor: Left cervical facet joint injections C1-2 to C6-7	Neck

5027-079		Doctor: review of recent cervical MRI which showed a herniated disc at C6 with DDD; also has neck pain with radiation into B/L shoulders and down the left arm	Neck/ Back
5082-071		Doctor: neck pain and LBP; neck pain is now worse than back pain. Currently has cervical ESI and lumbar ESI scheduled.	Neck/ Back
5059-139 to 141		Doctor: c/o signficant LBP radiating into both lower extremities; recommended trial of ESI and possible lysis of epidural adhesions in the area of the left L5 nerve root sDoctorve; now has addition of neck pain; lumbar facet injection performed	Neck/ Back
5098-015 to 017		Doctor: h/o back pain, neck pain and significant left sided arm pain; recommended a myelogram to assees symtpoms but also discussed disc fusion and/or replacement	Neck/ Back
5029-009		Doctor: cont'd c/o neck and back pain	Neck/ Back
5065-108 to 110		Doctor: DX post Doctorinectomy syndrome with residual radiculopathy in the left L5 nerve root distribution, status post cervical diskectomy with scar formation, mechanical back symptomology with paravertebral spasm TX: cervical facet joint injections administered at C2-3, C3-4, C4-5, C5-6, and C6-7 on the right side	Neck/ Back
5027-210 to 213		Doctor: c/o pain all over post MVA, ambulatory dysfunction and neck pain; current meds include Fentanyl patch 50mg; Percocet 5/325 3 tab per week which provides good relief; DX: Chronic pain syndrome; gait abnormality; s/s neck; cervicalgia; medications long term use encounter; drug dependence	Neck/ Back

065-111		Doctor: Cervical facet joint injections C2-3, C3-4, C4-5, C5-6, and C6-7 on the right side; references cognitive changes in the last 1-2 months; problems with concentration and memory	Neck/ Psych
5027-243 to 244		Neuro: c/o increase in cluster headaches; stress increases the headache and Lexapro helps	Neuro
5046-054 to 057		Rehab Note: Unable to follow commands	Neuro
5081-118 to 120		Progress Note: Opens eyes and made eye contact.	Neuro
5030-010 to 011		Doctor: Neuro eval positive for numerous limitations including problems with concentration, memory, speech, personality change. Conclusionwas that "Patient"made significant improvement since the TBI and agrees with placement at hospital for further tx.	Neuro
5030-008 to 009		Doctor: "Clearly appears to have improved with regard to his cognitive function over the past 3 months."	Neuro
5030-006 to 007		Doctor: Continues to make great strides with regard to his cognition. "Patient"c/o severe pain. thought that brain injury intensified his pain. Conclusion: "significant ongoing improvement with regard to his traumatic brain injury and subsequent symptomology."	Neuro
5030-004 to 005		Doctor: C/O dizziness but was later determined to be lightheadness related to postional changes. Keppra was discontinued.	Neuro
5030-002 to 003		Doctor: "Patient"more talkative and well oriented. Reports "excellent ongoing improvement."	Neuro
5027-152 to 153		Doctor: "Patient"more talkative and well oriented. Reports "excellent ongoing improvement."	Neuro
5039-002 to 004		Doctor: c/o worsening and more frequent dizziness	Neuro
5071-138		Neuro: "Patient"drove the car to the store to get munchies without wife's knowledge or medical clearance.	Neuro
5027-150 to 151		Doctor: Exam showed cognitive function intact and seizure free, yet still on Keppra.	Neuro
5027-196 to 201		Neuro: DX mild obstructive sleep apnea, paradoxical insomnia and co-morbid mood disorder and obesity	Neuro
5071-048		Neuro: Only required minimal cues to complete household chores on a list, wash dishes, sweeping the floor, vacuuming, and updating Ipad calendar.	Neuro
5042-095		Hospital: "fall on concrete after tripping over something on the ground. Patient complains of more dizziness and more blurred vision that usual. Patient has history of TBI."	Neuro
5071-018		Hospital: Discharge (admission on date)	Neuro
5071-043 to 045		Hospital: Discharge showed progress in multiple area including improved emotional adjustment (team does not seem to be aware of prior mood disorder and vocational limits), development of compensatory strategies for residual impairments, and development of meaningful ADL's and routine	Neuro
5071-035 to 036		Hospital: needs max assistance from wife to do ADL5 and chores due to decreased initiation and memory from TBI	Neuro
5034-002 to 003		Doctor: C/O dizziness but it was later revealed to be gait ataxia. Wife mentioned his memory was slipping. They discussed ventriculoperitoneal shunting.	Neuro
5036-002 to 006		Doctor: c/o headaches and dizziness since accident; possible dilated ventricles	Neuro
5027-148 to 149		Doctor: 2nd opinion for ventricular peritoneal shunt; c/o persistent dizziness and headache with vertigo; DX: TBI, post-traumatic encephalopathy, vestibular dysfunction- bilateral, acquired cerebral ventriculolmegaly.	Neuro
5019-139		Doctor: Letter indicating that "Patient"made considerable progress in therapy but still requires assistance	Neuro

5072-101 to 103		Hospital: Discharge DX: TBI, subarachnoid hemorrhage, subdural hemorrhage and DAI; ambulatory dysfunction; dysphagia; status post infected left urinoma; left clavicle fracture; status post multiple rib fractures; status post right adrenal hemorrhage; left renal contusion; lumbar spine fracture of the transverse process; discharge status stable; PEG tube still attached on discharge	Post MVA
5075-282 to 283		Hospital- Discharge from PT	Post MVA
5075-132		Hospital- Discharge from OT	Post MVA
5075-292		Hospital- Discharge from Speech Pathology	Post MVA
5095-090 to 091		Rehab Discharge DX: gait impairment; ADL dysfunction; TBI with MVA and multiple trauma; cognitive impairment; seizure; dystonia; GERD; Constipation; insomnia; adj d/o depression; chronic pain; spine fx; rib fractures with resolved flail chest; renal contusion; DOD; dysphagia	Post MVA
5027-070		Doctor: Hasn't been seen in the office since 12/2006 but needs refills on anxiety and depression meds due to recent exacerbation of symptoms from work issues RX: Lexapro and Ambien	Psych
5027-237		Doctor: fearful of becoming ill/ hypochondriacal; forced to resign from job he had for 16 years; accused of angry/ threatening behaviors	Psych
5027-071		Doctor: "emotionally, he still has issues..."; current meds: Lexapro and Ambien	Psych
5024-126		Doctor: "Patient"became depressed 9 months earlier re: sad mood, anxiety, irritability, diff. , low energy and low motivation. Became withdrawn and displayed psychomotor retardation. DX: major depression. TX: Lexapro, Ambien, Abilify	Psych
5024-111		Doctor: homicidal thoughts towards co-workers. Mentions that he has been off his meds.	Psych
5024-109		Doctor: struggling with feelings of anger and revenge. He is back on his meds. Gave his weapons to his brother for safe keeping.	Psych
5024-102		Doctor: Diff with vocational adjustment; might lose job due to excess absences. "Explored possibility that he might be sabotaging himself."	Psych
5024-101		Doctor: reports increased stress at work, anxiety, and irritability over last 2 weeks.	Psych
5024-095		Doctor: (last visit before MVA) "Patient"was taking Abilify, Dalmane, Lexapro, and Klonopin.	Psych
5024-097		Doctor: (termination) Reports "Patient"has been treating since (date) for depression and triggers include job difficulties. (GAF-65)	Psych