MEDICAL CHRONOLOGY - INSTRUCTIONS TO FOLLOW

General Instructions:

I and II: Accident report and EMS report: *These will be left blank if the records are not available/applicable*

III. Injury report: *This comprises of an abstract of the patient's related damages, surgical details, disability, ADLs details, etc – This table will be filled only if there is one date of loss available.*

IV: Brief Summary/Flow of Events:
This will include only the related prior conditions, injuries due to the subject incident, significant surgical procedures, therapy outcome, any complication due to hospitalization and status as per the last available record. Events will be presented date wise with provider details – this will be filled only if there are more than one date of loss or if requested as a standing order.

V: Missing medical record: *This table comprises of all the missing records, inclusive of interim, probable and confirmatory missing records.*

VI. Patient History:
Details related to the patient's past history (medical, surgical, social, occupational , family history and allergy details.) present in the medical records

Verbatim Detailed Medical Chronology:
Information captured "as it is" in the medical records without alteration of the meaning. Type of information capture (all details/zoom-out model and relevant details/zoom-in model) is as per the demands of the case which will be elaborated under the 'Specific Instructions'

Reviewer's Comments:
*Comments on contradictory information and misinterpretations in the medical records, illegible handwritten notes, missing records, clarifications needed etc. are given in italics and red font color and will appear as * Reviewer's Comment*

Illegible Dates: *Illegible and missing dates are presented as "00/00/0000"(mm/dd/yyyy format)*

Illegible Notes: *Illegible handwritten notes are left as a blank space "_____" with a note as "Illegible Notes" in the heading of the particular consultation/report.*

Specific Instructions:

- *Medical chronology focuses on the premises liability on MM/DD/2018, the resulting injuries and their treatment*
- *All visits that are pertinent to subject injury are summarized in detail*
- *Repeated information has not been captured in the chronology*
- ***Therapy records:*** *A detailed description of initial and final chiropractic therapy visits are provided. Interim visits are combined and a brief summary of the same is provided*
- *Case specific details have been highlighted in yellow color for easy reference*

I. Accident Report *Not applicable*

Page Reference to Police Report/Accident Scene Investigation Report

PARAMETER	DETAILS		PDF REF
Date and Time of Accident			
Location	(City, County, Intersection Details)		
Direction of Travel			
Speed			
Scene of Accident	(Weather, Road, Lighting Conditions)		
No of Vehicles Involved			
Party Details			
Vehicle Details	Model		
	Year		
	Color		
	VIN Number		
	Policy Number		
Description of Accident			
Did Airbag Deploy?			
Seat Belt Applied?			
Seating Position			
Vehicle Damages/ Vehicle Towed			
Property loss			
Violation Code/Reason for Accident/ Sobriety and Distraction Factors			
Parties Cited/At Fault Party			
Was 911 Called?			
Who Arrived at the scene First?	Fire Department/Police/EMS		
Other Details			

II. EMS Report Abstract

Page Reference to EMS Report: *Not applicable*

PARAMETER	DETAILS		PDF REF
Date			
EMS Name			
Time Details	**Time Called**		
	Time Arrived		
	Time Departed		
	Time Arrived at Hospital		
Response Code/Level of Medical Care			
Status of Patient on Arrival			
Chief Complaints/Narrative			
Vitals/ Pain Level			
Loss of Consciousness			
Impression			
Treatment			
Neck Collar Applied?			
Backboard Support?			
Destination			
Other Details			

III. Injury Report

PARAMETER	DETAILS	PDF REF
Date of injury	MM/DD/2018	24
Related Injuries and Medical Condition Before incident	**Past medical history:** Spondylolisthesis, brachial neuritis or radiculitis and shoulder pain. **Past surgical history:** No pertinent past surgical history.	43
Damages Developed/Sustained as a result of incident (diagnoses alone)	• Traumatic Cervical Spine Sprain with Acceleration/ Deceleration Syndrome • Traumatic Thoracic Spine Sprain with cost neuralgia • Traumatic Lumbar Spine Sprain • Sprain of Ligaments of Sacroiliac Joint • Traumatic Left Shoulder Sprain • Sprain of the Left Sternoclavicular Joint • Post Traumatic Headache • Psoas Tendonitis • Moderate Neurocognitive Deficits due to Traumatic Brain Injury • Depression and Generalized Anxiety Disorder • Bilateral Motor Weakness of Hands • Post-Traumatic Vestibular Dysfunction • Insomnia	251, 124
Surgeries or procedures underwent as a result of incident	**Procedures:** **MM/DD/2018:** Lumbar epidural injection #1 at L5-S1 level via interlaminar approach. **MM/DD/2018:** Cervical epidural injection # 1 at C7-T1 level via interlaminar approach. **MM/DD/2018:** Lumbar epidural injection #2 at L4-L5 level via interlaminar approach. **MM/DD/2018:** Cervical epidural injection # 2 at C7-T1 level via interlaminar approach. **MM/DD/2018:** Lumbar epidural injection # 3 at L2-L3 level via interlaminar approach. **Surgeries:** *Not available*	62-65, 72-73, 82-83
Postsurgical complications (infection, DVT, etc)	None	62, 63
Aggravation of pre-existing conditions (Physician or therapist's statement alone)	*Physician or therapist's statement regarding aggravation of pre-existing condition is unavailable for review.*	
Did patient return to work (Date and work status as per the last few visits/therapies)	She is retired.	24
Disability (Physician or therapist's statement alone)	*Physician or therapist's statement regarding disability is unavailable for review.*	

IV. Brief Summary/Flow of Events *(Not applicable)*

V. Missing Medical Records

What Records are Needed	Hospital/ Medical Provider	Date/Time Period	Is Record Missing Confirmatory or Probable?	Hint/Clue that records are missing	Reference
Office/ follow-up visit/ lab study	XXX Clinic	MM/DD/2018 – MM/DD/2018	Confirmatory	Mentioned in Billing statement dated MM/DD/2018 to MM/DD/2018	31-39, 42

VI. Patient History

Past medical history: Gastroesophageal reflux disease, hiatal hernia, spondylolisthesis, and allergic rhinitis, diverticula of colon, abnormal mammogram, shoulder pain and brachial neuritis and Hypertension, knee replacement and gallstones. (PDF REF: 43, 8)

Past surgical history: Bilateral knee replacement, Cataract removal in left eye, Gallbladder removal, Gland in right eye and Hysterectomy. (PDF REF: 93)

Prior occupational history: She worked for XX Hospital. She retired after YY years of employment. (PDF REF: 116)

Current occupational history: Retired. (PDF REF: 24)

Family History: Diabetes and lung cancer in paternal and kidney problems in maternal family. (PDF REF: 94)

Social History: The patient denies drinking, smoking, or any illegal drug use. She lives independently. (PDF REF: 93)

Drug Allergy: Codeine causes itching and Duloxetine causes trembling and made her feel funny. (PDF REF: 43)

Other allergies: No food and environmental allergies. (PDF REF: 242)

Detailed Chronology

DATE	PROVIDER	OCCURRENCE/TREATMENT	PDF REF
		Premises liability on MM/DD/2018	
MM/DD/2018	XXX Clinic XX Neurology Ezekiel XX, M.D.	**Office visit for headache:** Severe headache from head injury. **Diagnosis:** Headache. **Prescription:** Gabapentin 100 mg capsule. **Recommendations:** CT angio of brain **Return to clinic:** In about 4 weeks.	43-46
MM/DD/2018		**Patient's information questionnaire:** **Date of injury:** MM/DD/2018 **Accident information:** **Date of incident:** MM/DD/2018 **Time:** Approximately 3.00 PM **Location of incident/ place:** XX **Briefly describe incident:** As I was exiting the fitting room in the store I handed the garments I did not want to the attendant. When I bent down to hand the garments to the attendant through the window where she was I hit my head very hard on the crossbar of the opening of the desk where the attendant was. I was stunned from the hit. I developed a knot on my forehead and have had continues bad headaches since hitting my head.	24-26
MM/DD/2018	XX Health Mary XX, AGACNP-BC	**Initial medical consultation for left shoulder pain:** **Chief Complaint/History of Present illness:** Patient is a YY year old female who presented for initial medical consultation. She complaints *(must be complains)* of left shoulder pain. She feels burning pain on her shoulder and neck area. Pain gets worse with movement and pain when raising the Left shoulder. She feels relief when laying in bed and taking pain medications. She has not started physical therapy and takes pain medications Ibuprofen. She was in a department store where there was a stand with an iron pole. She hit her head against the iron pole and sustained lacerations and swelling. She denies having syncope but was shocked for a moment and got dizzy. During the accident. She jerked her neck and she has been having headaches. She also complained of neck pain and tenderness. She is being followed up by a Neurologist for her headaches and had previous CT scan. She is having insomnia due to pain. Denies fever or chills. Patient went to XX department store and accidentally hit her head against an iron pole. She was not taken to the hospital at the scene of the accident.	8-10

DATE	PROVIDER	OCCURRENCE/TREATMENT	PDF REF
		Subjective: **Neck:** Intermittent pain **Left shoulder:** Constant pain **Headaches:** Constant pain **Physical examination:** **Cervical Spine:** Restricted range of motion with no pain Muscle spasms on cervical paraspinal and upper trapezius (left side) **Extremity:** **Left shoulder:** Normal range of motion with pain. Negative Apley's Left side of the forehead has laceration and scar healed **Assessment and diagnosis:** • Pain, left shoulder • Pain, neck • Headaches • Status post personal injury • Insomnia **Plan/ recommendations:** Start physical therapy Ice /heat therapy Medications • Ibuprofen 800 mg 1 tablet PO every 8 hours as needed x 1 week • Flexeril 5 mg 1 tablet PO every 8 hours as needed muscle spasms x 1 week Refer CT head without contrast Refer X-ray of cervical spine Follow-up in 3 weeks Recommended follow-up with neurologist (Headaches)	
MM/DD/2018	XX Health Mohsin XX, M.D.	**X-ray of cervical spine:** **Indication:** Neck pain. **Findings:** No acute fracture or dislocation is identified. On the lateral view, C2-C7 vertebral bodies are demonstrated with straightening of the cervical spine. The bones appear mildly osteopenic. The cervical vertebral body heights are grossly maintained. Proliferative multilevel endplate spurring/osteophyte formations identified involving the endplates both anteriorly and laterally. Varying degrees of neural foraminal narrowing ranging from moderate to moderate to severe throughout the cervical spine, most pronounced at C5-C6 and C6-C7. Vertebral and facet joint hypertrophic changes likely contribute to neural foraminal narrowing. No prevertebral soft tissue swelling. Soft tissues and lung fields appear unremarkable. **Impression:** No acute fracture or dislocation is identified. Degenerative changes involving the cervical spine as above.	11

DATE	PROVIDER	OCCURRENCE/TREATMENT	PDF REF
MM/DD/2018	XX Clinic Randall XXX, DC	**Initial chiropractic therapy evaluation for neck and back pain:** *(illegible notes)* **Please describe any changes in your condition:** Severe headache and left side of neck and shoulder burning. Cannot sit in one position for long period of time. **Therapeutics:** Hot/cold packs, Electrical Muscle Stimulation (EMS), diathermy, traction and massage. **Findings:** **Initial examination:** Initial visit complete exam, severe headaches, pain in back of neck, left sided pain in both right and left shoulders, pain upper back, burning pain radiating into both right and left arms, pain in back – Muscle spasms in Trapezius, Sternocleidomastoid (SCM), deltoids, paraspinals, rhomboids, deltoids, adjustments in C4, C5, T2, T4, T7, T8, L4 and L5. Patient felt better. Return in 1-2 days.	253
MM/DD/2018	XXX Services Mustafa XXX, M.D.	**MRI of lumbar spine without contrast:** **Clinical history:** Injury. Low back pain. **Impression:** • **L1 -L2:** 2 mm left paracentral broad-based disc herniation indenting the ventral thecal sac lateralizing to the left. There is bilateral facet hypertrophy with hypertrophic ligaments. Bilateral foraminal stenosis left more than right. Moderate central spinal stenosis • **L2-L3:** 4 mm postero-central broad-based subligamentous disc herniation indenting the ventral thecal sac. Bilateral facet hypertrophy with hypertrophic ligaments. Bilateral foraminal stenosis. Mild central spinal stenosis • **L3-L4:** Grade 1 anterolisthesis of L3 over L4. 5 mm postero-central broad-based disc herniation indenting the ventral thecal sac. Herniated disc lateralizes bilaterally. Bilateral foraminal stenosis and impingement of exiting nerves. Moderate facet hypertrophy with moderate central spinal stenosis • **L4-L5:** 2 mm postero-central broad-based disc herniation indenting the ventral thecal sac. Bilateral facet hypertrophy with hypertrophic ligaments. Right more than left impingement of right exiting nerve • **L5- S1:** 3 mm postero-central broad-based disc herniation indenting the ventral thecal sac. Herniated disc lateralizes bilaterally left more than right bilateral facet hypertrophy. Left more than right impingement of left exiting nerve	15-17
MM/DD/2018	XXX Services Mustafa XXX, M.D.	**MRI of left shoulder without contrast:** **History:** Left shoulder pain. Injury **Impression:** • High-grade partial tear of the rotator cuff particularly the supraspinatus. Fluid surrounding the supraspinatus tendon • Minimal joint effusion • Hypertrophic arthropathy of the acromioclavicular joint. No impingement	18-19

DATE	PROVIDER	OCCURRENCE/TREATMENT	PDF REF
MM/DD/2018	XXX Services Mustafa XXX, M.D.	**CT scan of brain without contrast:** **Clinical history:** Injury. Headaches. **Impression:** Normal CT scan of the brain without contrast.	20
MM/DD/2018	XXX Services Mustafa XXX, M.D.	**MRI of cervical spine without contrast:** **Clinical history:** Injury. Neck pain. **Impression:** • **C4-C5:** Bilateral uncovertebral and facet hypertrophy. Bilateral foraminal stenosis left more than right. Impingement of left exiting nerve. No evidence of disc bulge or disc herniation. Loss of height of disc. Moderate anterior spondylosis • **C5-C6:** Moderate loss of height of disc. Moderate anterior spondylosis. Bilateral uncovertebral and facet hypertrophy. Bilateral foraminal stenosis and impingement of exiting nerves left more than right • **C6-C7:** Moderate loss of height of disc. Bilateral uncovertebral and facet hypertrophy. Bilateral foraminal stenosis left more than right. Moderate anterior spondylosis. No evidence of disc bulge or herniation • **C7-T1:** 3 mm postero-central broad-based disc herniation indenting the ventral thecal sac. Bilateral uncovertebral axial facet hypertrophy. Bilateral foraminal stenosis and impingement of exiting nerves	21-23
MM/DD/2018 - MM/DD/2018	XX Clinic Randall XXX, DC	**Summary of multiple chiropractic therapy visits for neck and back pain:** **Total no of visits:** 14 **Areas treated:** Neck, left shoulder, upper and lower back regions. **Treatment rendered:** Chiropractic manipulation, extremity manipulation, electrotherapy, traction, massage, hot/cold packs and diathermy. **Summary:** **MM/DD/2018:** Still headaches, pain in left neck, shoulder and lower back. **08/02/2018:** Patient complained of pain in shoulders, pain in back of neck – left side, pain in low back, severe headaches and pain in upper back. **MM/DD/2018:** Patient complained of pain in shoulders, headaches, pain in beck of neck, low back, mid back and upper back. **MM/DD/2018:** Pain in left shoulder and headache. **MM/DD/2018:** Lots of pain in neck on left side with burning headache. **MM/DD/2018:** Still having burning headache. Burning in left side of neck and shoulders. **MM/DD/2018:** Headaches and shoulder pain. **MM/DD/2018:** Neck and shoulder pain with headache. **MM/DD/2018:** Patient complained of headache, neck, shoulder and back pain. **MM/DD/2018:** Patient complained of headache, neck, shoulder and back pain. Patient felt better post treatment. **MM/DD/2018:** Patient complained of headache, neck, shoulder and back pain. Felt better and to return next week. **MM/DD/2018:** Patient complained of neck and shoulder pain. Back pain with hip exacerbated. Felt better after treatment. To return in 1-2 days.	254-267

DATE	PROVIDER	OCCURRENCE/TREATMENT	PDF REF
		MM/DD/2018: Patient complains of neck and shoulder pain. **MM/DD/2018:** Patient complained of neck, shoulder and back pain. Pain improved. Felt better. To return next week. **Reviewer's comments: Multiple chiropractic therapy visits have been summarized with significant events.*	
MM/DD/2018	XXXX Nooruddin XXX, M.D.	**Office visit for neck pain and low back pain:** Lower back with radiculopathy in left lower extremity Neck pain **History of present illness:** Patient presented to clinic today with pain in lower back with radiculopathy in left lower extremity and neck. Patient was involved in accident on MM/DD/2018 where she hit the head on store, sent for PCP and sent for Physical Therapy (PT)/ Chiropractic Therapy (CT). Patient experiences constant severe in lower back, and intermittent moderate pain in neck. Pain is aggravated by prolonged sitting, walking, bending or and picking up. Pain gets mild relief by heat, cold and massages. Patient underwent therapy for 5 months and reports no significant relief in symptoms Patient was retired, home work. Cannot stand a lot over the stove and reduced hours due to pain. **Neurology examination:** **Sensory:** Tenderness in neck and lower back **Motor:** 4/5 upper and lower extremity, decreased range of motion in neck and lower back **Reflexes:** Decrease in patellar and achilles **Radiculopathy:** Left lower extremity and positive straight leg raising test in bilateral legs **Pain:** Neck and lower back **Assessment:** Patient is a YY year old female patient with hypertension presented with lower back radiating to left lower extremity and neck pain following a hit on head on store. Physical and neurological exam demonstrated tenderness with decreased range of motion in neck and lower back. Recent MRI findings reported disc protrusion and correlates significantly with patient's symptoms. After today's visit, patient is recommended Epidural Steroid Injection (ESI) treatment for pain relief. **Plan:** • Recommend ESI #1 of lumbar spine (1st in a series of 3 recommended injections) • Recommend ESI #1 of cervical spine (1st in a series of 3 recommended injections) • Procedure was explained in detail of risks and benefits • Patient is advised to continue with physical therapy/chiropractic treatment • Follow up is recommended for ESI	58-61
MM/DD/2018	XXXX	**Procedure report for lumbar epidural steroid injection #1:** **Principal Diagnosis:**	62-63

DATE	PROVIDER	OCCURRENCE/TREATMENT	PDF REF
	Nooruddin XXX, M.D.	Spondylosis, Lumbar Stenosis, Lumbar Radiculopathy, Lumbar Pain, Lumbar(Lumbago) Numbness/Tingling **Anesthesia:** Local **Procedure:** Lumbar epidural injection at L5-S1 level via interlaminar approach. **Medication:** 2 cc of Omnipaque 240 contrast material, 1 cc of Depo-Medrol (40 mg/ml) and 2 cc of preservative free saline. **Impression:** Successful lumbar epidural injection at L5-S1 level via interlaminar approach. Patient reported significant improvement of pain symptoms. No complications were noted during or immediately after the procedure. Patient did not report any aggravation of pain after procedure; neurological exam demonstrated normal functioning of the bilateral lower extremities.	
MM/DD/2018	XXXX Nooruddin XXX, M.D.	**Procedure report for cervical epidural steroid injection #1:** **Principal Diagnosis:** Spondylosis, cervical Stenosis, cervical Pain, cervical (Cervicalgia) **Anesthesia:** Local **Procedure:** Cervical epidural injection at C7-T1 level via interlaminar approach. **Medication:** 2 cc of Omnipaque 240 contrast material, 1 cc of Depo-Medrol (40 mg/ml) and 2 cc of preservative free saline. **Impression:** Successful cervical epidural injection at C7-T1 level via interlaminar approach. Patient reported significant improvement of pain symptoms. No complications were noted during or immediately after the procedure. Patient did not report any aggravation of pain after procedure; neurological exam demonstrated normal functioning of the bilateral upper extremities.	64-65
MM/DD/2018	XXXX Nooruddin XXX, M.D.	**Follow-up visit for neck and back pain:** Lower back with radiculopathy in bilateral thighs, post ESI x 1 Neck pain, post ESI x 1 **History of chief complaint:** Patient received lumbar ESI # 1 on L5-S1 on MM/DD/2018 and cervical ESI #	66-71

DATE	PROVIDER	OCCURRENCE/TREATMENT	PDF REF
		1 on C7-T1. Patient complaints of lower back pain radiating to bilateral thighs and neck pain. **Neurology examination:** **Sensory:** Tenderness in neck and lower back **Motor:** 5/5 upper and lower extremity, decreased range of motion in neck and lower back **Reflexes:** Normal in patellar and achilles **Radiculopathy:** Bilateral thighs and positive straight leg raising test in bilateral legs. **Pain:** Neck and lower back **Assessment:** Patient is a YY year old female patient with hypertension presented with lower back radiating to left lower extremity and neck pain following a hit on head on store. Physical and neurological exam demonstrated tenderness with decreased range of motion in neck and lower back. Recent MRI findings reported disc protrusion and correlates significantly with patient's symptoms. After today's visit, patient is recommended ESI treatment for pain relief. Patient received lumbar ESI # 1 on L5-S1 on MM/DD/2018 and cervical ESI # 1 on C7-T1. Patient complaints of lower back pain radiating to bilateral thighs and neck pain. Physical exam reports tenderness on the neck (left side) and lower back with decreased range of motion. **Plan:** • Recommend ESI #2 of lumbar spine (2nd in a series of 3 recommended injections) • Recommend ESI #2 of cervical spine (2nd in a series of 3 recommended injections) • Procedure was explained in detail of risks and benefits • Patient is advised to continue with physical therapy/chiropractic treatment • Follow up is recommended in one week after ESI of cervical spine	
MM/DD/2018	XXXX Nooruddin XXX, M.D.	**Procedure report for lumbar epidural steroid injection #2:** **Principal Diagnosis:** Spondylosis, Lumbar Stenosis, Lumbar Radiculopathy, Lumbar Pain, Lumbar (Lumbago) Numbness/Tingling **Anesthesia:** Local **Procedure:** Lumbar epidural injection at L4-L5 level via interlaminar approach. **Medication:** 2 cc of Omnipaque 240 contrast material, 1 cc of Depo-Medrol (40 mg/ml) and 2 cc of preservative free saline.	72-73

DATE	PROVIDER	OCCURRENCE/TREATMENT	PDF REF
		Impression: Successful lumbar epidural injection at L4-L5 level via interlaminar approach. Patient reported significant improvement of pain symptoms. No complications were noted during or immediately after the procedure. Patient did not report any aggravation of pain after procedure; neurological exam demonstrated normal functioning of the bilateral lower extremities.	
MM/DD/2018	XXXX Nooruddin XXX, M.D.	**Procedure report for cervical epidural steroid injection #2:** **Principal Diagnosis:** Spondylosis, cervical Stenosis, cervical Pain, cervical (Cervicalgia) **Anesthesia:** Local **Procedure:** Cervical epidural injection at C7-T1 level via interlaminar approach. **Medication:** 2 cc of Omnipaque 240 contrast material, 1 cc of Depo-Medrol (40 mg/ml) and 2 cc of preservative free saline. **Impression:** Successful cervical epidural injection at C7-T1 level via interlaminar approach. Patient reported significant improvement of pain symptoms. No complications were noted during or immediately after the procedure. Patient did not report any aggravation of pain after procedure; neurological exam demonstrated normal functioning of the bilateral upper extremities.	76-77
MM/DD/2018	XXXX Nooruddin XXX, M.D.	**Follow-up visit for neck and back pain:** Lower back with radiculopathy in bilateral thighs, post ESI x 1 Neck pain, post ESI x 2 **History of chief complaint:** Patient received prescription of Meloxicam followed by ESI # 2 on cervical spine on MM/DD/2018. The patient reports neck pain and lower back pain radiating to the bilateral legs. Pain in the lower back has decreased and neck pain has decreased. **Neurology examination:** **Sensory:** Tenderness in neck (left side) and lower back **Motor:** 5/5 upper and lower extremity, decreased range of motion in neck and lower back **Reflexes:** Normal **Radiculopathy:** Bilateral legs and positive straight leg raising test in bilateral legs **Pain:** Neck and lower back **Assessment:**	78-81

DATE	PROVIDER	OCCURRENCE/TREATMENT	PDF REF
		Patient is a YY year old female patient with hypertension presented with lower back radiating to left lower extremity and neck pain following a hit on head on store. Physical and neurological exam demonstrated tenderness with decreased range of motion in neck and lower back. Recent MRI findings reported disc protrusion and correlates significantly with patient's symptoms. After today's visit, patient is recommended ESI treatment for pain relief. Patient received lumbar ESI # 1 on L5-S1 on MM/DD/2018 and cervical ESI # 1 on C7-T1. Patient complaints of lower back pain radiating to bilateral thighs and neck pain. Physical exam reports tenderness on the neck (left side) and lower back with decreased range of motion. Patient is following up today after she rechecked prescription of Meloxicam followed by ESI # 2 on cervical spine on MM/DD/2018. The patient reports neck pain and lower back pain radiating to the bilateral legs. Physical and neurological exam shows tenderness and decreased range of motion on the neck and lower back. Pain in the lower back and neck pain has decreased. **Plan:** • Recommend ESI #2 of lumbar spine (2nd in a series of 3 recommended injections) • Recommend ESI #3 of cervical spine (3rd in a series of 3 recommended injections) • Procedure was explained in detail of risks and benefits • Patient is advised to continue with physical therapy/chiropractic treatment • Follow up is recommended for ESI	
MM/DD/2018	XXXX Nooruddin XXX, M.D.	**Procedure report for lumbar epidural steroid injection #3:** **Principal Diagnosis:** Spondylosis, Lumbar Stenosis, Lumbar Radiculopathy, Lumbar Pain, Lumbar (Lumbago) Numbness/Tingling **Anesthesia:** Local **Procedure:** Lumbar epidural injection at L2-L3 level via interlaminar approach. **Medication:** 2 cc of Omnipaque 240 contrast material, 1 cc of Depo-Medrol (40 mg/ml) and 2 cc of preservative free saline. **Impression:** Successful lumbar epidural injection at L2-L3 level via interlaminar approach. No complications were noted during or immediately after the procedure. Patient did not report any aggravation of pain after procedure; neurological exam demonstrated normal functioning of the bilateral lower extremities.	82-83
MM/DD/2	XXXX	**Follow-up visit for neck and back pain:**	56-57

DATE	PROVIDER	OCCURRENCE/TREATMENT	PDF REF
018	Nooruddin XXX, M.D.	Lower back with radiculopathy in bilateral thighs, post ESI x 3 Neck pain, post ESI x 2 **History of chief complaint:** Patient presented to the clinic initially on the first visit with lower back pain and neck pain with radiculopathy. Under our care, patient received multiple lumbar and cervical ESIs. On her most recent visit on MM/DD/2018, she received a third lumbar ESI at L2-3 level. On today's followup visit, patient reports relieve with neck and lower back pain with mild residual burning sensation in the neck and mild residual stiffness in the lower back. **Current medications:** Ibuprofen 800 and Aspirin. **Physical exam:** Tenderness positive in the neck. Range of motion is reduced in the neck and lower back. Motor strength is 5/5 in the upper and lower extremities. Straight leg raising test is positive on the left side. Cervical distraction test and shoulder depression test are negative bilaterally. Lasegue sign is positive on the left and Bechterew test is negative. **Assessment/plan:** Patient presents today as a followup after three lumbar and two cervical ESIs performed over the last few months. Patient reports relief of pain with mild residual burning and stiffness in the neck and lower back respectively. Patient is advised to continue with physical therapy/chiropractor's treatment. She is also advised to keep an eye on her neck pain and if starts creeping back up to come and see me for the third cervical ESI. Followup is recommended if clinically indicated.	
MM/DD/2018	XX Clinic Randall XXX, DC	**Chiropractic therapy narrative report:** **History:** The above captioned YY-year-old female presented in my office on MM/DD/2018 suffering from injuries sustained from a fall in on MM/DD/2018. She apparently hit. She complained headaches, dizziness, "burning sensations", neck pain and stiffness with restricted motion, shoulder, and back pains. She also stated that she apparently hit her head on impact was dazed and had vision impairment initially. She had neck, shoulder, and back pains upon arising and difficulty with activities of daily living, extended standing, walking stooping, prolonged driving and bending. **Examination:** This patient presented in moderately severe pain and distress, with antalgic posture. Usual orthopedic, neurological, and physical examinations revealed	250-252

DATE	PROVIDER	OCCURRENCE/TREATMENT	PDF REF
		positive findings for cervical spine flexion/extension, lateral flexion, and rotation with positive foraminal compression. There were spasms and contractures with tenderness of the cervical spine. Dorsolumbar bending was positive with Valsalva's present. Her costal muscles and ribs were tender to palpation. There were spasms and contractures of the Costal and Thoracic Spine muscles. The Right sternoclavicular joint, biceps tendon and shoulder muscles were tender to palpation with hyperabduction, adduction, Dugas' and Apley's present. There were spasms and contractures of the shoulder muscles and tendons. Straight leg rising was positive Goldthwait's, Minor's, Braggards' and Fabre-Patrick's present. There were spasms and contractures of the Lumbosacral Spine. **Diagnosis:** • Traumatic Cervical Spine Sprain with Acceleration/ Deceleration Syndrome • Traumatic Thoracic Spine Sprain with cost neuralgia • Traumatic Lumbar Spine Sprain • Sprain of Ligaments of Sacroiliac Joint • Traumatic Left Shoulder Sprain • Sprain of the Left Sternoclavicular Joint • Post Traumatic Headache • Psoas Tendinitis **Treatment:** This patient was treated conservatively with Chiropractic Manipulation, Hot/cold packs, traction, electrotherapy, diathermy, traction, and massage and given home active care direction. She initially went to the ER. The patient was referred for Pain management and released on an as needed basis. **Prognosis:** Fair. She had residuals of the Cervical and Lumbosacral Spine. She apparently has Traumatic Brain Injury (TBI) symptoms and was referred for evaluation. The patient was released on an as needed basis. In my experience, any injury to the foraminal confines of the spine will cause neurological insult to the motor and peripheral nerves with spinal somatic and spinal visceral syndromes as well as the concurrent myositis. Research on the residuals from these types of injuries by Murphy et al states that the patient will have symptomatic episodes from 90 days to two years in 76% of the cases and up to ten years in others.	
MM/DD/2018	XX Clinic Randall XXX, DC	**Final chiropractic therapy evaluation for neck and back pain:** *(illegible notes)* **Please describe any changes in your condition:** Very little pain just in lower back. **Therapeutics:** Hot/cold packs, EMS, diathermy and traction. **Findings:**	268

DATE	PROVIDER	OCCURRENCE/TREATMENT	PDF REF
		Patient returns with lower back pain, neck and shoulder stiffness, spine severe. Trapezius, erector spinae, sacrum, gluteus, psoas and leg tight. Spinal adjustments in C4-C7, T6-T12, L3-S1 __. Released on as needed basis.	
MM/DD/2018	XXX Institute Huma XXX, M.D.	**Initial comprehensive evaluation for head injury:** **Mechanism of injury:** Blunt force trauma to the head **History of present illness:** On MM/DD/2018, patient suffered from a blunt force trauma. She was in a department store returning clothing from a dressing room when she struck her head on an iron pole. The force of the impact caused her to move in a sudden backward motion and caused a laceration to her forehead. She had a loss of consciousness for a few seconds. She experienced dizziness, headache, and neck pain. She went home and applied ice to her head and neck for relief. She experienced a severe headache for several days following the impact that she describes as a burning sensation that encompassed her entire head. **She was seen today and reports the following:** **Post-traumatic headaches/migraines:** On the scale of 1 to 10, she reports migraines of 8/10 in intensity that will last for 3 hours and occur 3-4 times a week. Her migraines originate in her frontal lobe and radiate to her occipital lobe. She describes her migraines as a sharp pain. She will occasionally experience a burning sensation at the site of trauma. Stress and watching television will trigger her migraines. Ibuprofen and Aleve provide partial relief. **Traumatic brain injury with neuro cognitive deficits:** Since the accident, she has experienced neuro-cognitive dysfunction. She reports dizziness, ringing in her ears, trouble sleeping, fatigue, attention deficits, short term memory deficits, anxiety, and depression. Her daughter has told her that she has become much more impatient and irritable. She states that she says things she doesn't mean and has a shorter temper than she did prior to the trauma. She is unable to maintain her focus for longer than 10 minutes and finds difficulty in watching movies. **Depression and anxiety:** She demonstrates concern regarding her recovery and her ability to contribute to her family's well-being. **Vestibular ataxia:** She frequently experiences a sense of imbalance and reaches for stabilizing objects when walking. Occasionally, she will sit down when walking due to concern that she will fall. **Auditory deficits:** She experiences ringing in her ears concurrent with a post-traumatic migraine. In addition, she reports worsening of her hearing. She wears bilateral hearing aids. **Insomnia:** She has difficulty staying asleep 1-2 times each week. She experiences fatigue as a result. **Generalized body pain:** She reports neck pain with an intensity of 5/10; left	92-113

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		shoulder pain with 6/10 intensity; and back pain with 9/10 intensity. She had epidural steroid injections in her neck and in her lower back for relief. She experiences a burning sensation in her left shoulder. **Intention Tremor:** She has an intention tremor in her left hand and a decreased strength in her left hand. She experiences the tremor when reaching for objects. Anxiety intensifies her tremor. **Review of systems:** **General/constitutional:** The patient reports fatigue. She denies fever, weakness, and weight gain or weight loss. **Ears, nose, mouth, and throat:** The patient reports ringing in her ears and decreased hearing. **Cardiovascular:** The patient reports high blood pressure **Musculoskeletal:** The patient reports neck pain, back pain, and left shoulder pain. She denies arm, buttock, thigh or calf cramps. No other joint or muscle pain. No muscle weakness or tenderness. No joint swelling. **Neurologic:** The patient reports post-traumatic headaches, dizziness, and short term memory loss. Patient has an intention tremor in her left hand. She denies fainting, muscle spasm, loss of consciousness, sensitivity or pain in the hands and feet. **Psychiatric:** The patient reports insomnia, anxiety, and depression. She denies thoughts of suicide. **Physical exam:** In general, the patient is sitting in a chair and demonstrates discomfort. **Spine:** Without scars, or scoliosis; pelvis/hips are normal to exam. Straight leg raising test is positive bilaterally. **Mood:** She was anxious and emotional during the interview. **Speech:** Patient can appropriately name objects. She does not appear to repeat phrases. She has spontaneous speech. **Cranial nerve VIII** has decreased hearing to finger rub bilaterally. Patient wears bilateral hearing aids. Strength is decreased in her left hand at 4/5. Waddell's signs are negative. No focal paresis or fasciculations are noted in any muscle groups. **Deep tendon reflexes:** Reflexes are 2+ and symmetric at the biceps, triceps, knees, and ankles. Plantar responses are flexor. **Gait:** Posture is normal. Patient is unable to perform tandem gait, unable to walk on toes, and unable to walk on heels with eyes open or with eyes closed due to imbalance. She almost fell when performing tandem gait with eyes closed. Romberg is negative. **Adventitious movements:** Patient has an intention tremor in her left hand. No myoclonus, tics, dystonia or fasciculations are noted during this exam. **Interpretation of the apraxia battery:**	

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		Patient participated in an assessment to measure the presence and severity of Apraxia. **Apraxia battery:** **Impairment Level:** **Mild:** Diadochokinetic Rate and Utterance Time for Polysyllabic Words. Patient has mild apraxia of speech for diadochokinetic rate and for utterance time for polysyllabic words. This shows impairment of speech motor performance, articulatory and phonatory processes involved in speaking. Her speech is less fluent compared to normal subjects. This patient needs to complete her workup for the type of injury she sustained, which includes multiple elements of traumatic brain injury with many ongoing post concussion symptoms. **Assessment and plan:** **Post-traumatic headaches/migraines** Since the accident of MM/DD/2018, she suffers from migraines of 8/10 intensity 3-4 times/week. There is a temporal relationship between the accident and the onset of migraine. Greater than 95% of traumatic brain injury patients suffer from post-traumatic headaches and migraines. Migraine has been identified as 7th most disabling disease and most disabling of all the neurological illnesses. These migraines will exert a damaging effect on patient's life, both personal and professional. Her ability to enjoy activities she was able to prior to her injury will be negatively impacted, and her quality of life will be diminished. I recommend the following treatment strategies for this patient: **Medical Management:** I will start the patient on prophylaxis of the migraines with Topiramate-XR 50 mg PO every day. If she is tolerating well, I will titrate her dose to 100 mg PO every day. The patient is also prescribed Butalbital-Acetaminophen-Caffeine 50-300-40 mg PO every 4 hours as needed. The patient should discontinue Ibuprofen 800 mg. **Interventional Headache Management:** If the medical management does not provide relief then the patient will have on Botulinum toxin A injection to improve the frequency and intensity of the post traumatic migraines. I also recommend bilateral Greater and Lesser Occipital Nerve Block under Ultrasound-guidance and bilateral Third Occipital Nerve Block under fluoroscopy to further ameliorate the frequency and intensity of the post-traumatic migraines. **Traumatic brain injury with neuro-cognitive deficits** Since the accident, patient is suffering from neuro-cognitive deficits. The following areas are presumably affected: • Memory • Learning • Intelligence • Language	

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		• Calculation • Visual and Spatial analysis • Problem solving • Judgment • Abstract thinking • Executive functions I will start the patient on neuro-rehabilitative exercises (listed below) to improve her neuro-cognitive deficits. **Neuro-rehabilitative exercises:** **The following exercises may partially restore/improve diminished brain functions:** Brain HQ Happy Neuron Lumosity Tactus Therapy Web Sudoku **Stress management:** General stress management techniques including meditation and massage therapy may be helpful. Compensatory strategies that may be useful for patient to implement in her daily living include: a. Allow more time to complete tasks to avoid time pressures b. Utilize a day planner/calendar to record appointments and important future tasks c. Write down and organize information to be remembered by carrying a small notebook and pen d. Break up longer tasks into multiple, shorter tasks and avoid multitasking e. Complete tasks in a quiet room, turning off televisions or other distracting sources f. If becoming fatigued or losing focus, stop and take a break before returning to the task **Neuropsychological assessment battery:** Comprehensive test/assessment of the patient's brain functions: Attention, processing speed, learning, memory, intelligence, language, sensory acuity, calculation, visuospatial ability, problem solving, judgment, abstract thinking, mood, and temperament. Should be performed 6 months or greater status post injury. I recommend the patient undergo a Neuropsychological Assessment Battery if the neuro-cognitive deficits persist. **Neuro-cognitive recovery supplements:** a. Vitamin D 3000 IU daily with food b. Fish Oil / Omega 3 Supplements 2-3 grams with food daily c. Probiotic d. Magnesium L Threonate 1-2 grams daily e. Vitamin B12 1000 micrograms daily f. Co-Enzyme Q10 100 mg daily	

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		g. N-Acetyl Cysteine 150 mg daily h. Zinc 20 mg daily i. Alpha Lipoic Acid (ALA) 100 mg daily j. Phosphatidylserine (PS) 100 mg daily k. Glucoraphanin 15 mg daily **Depressive disorder/generalized anxiety disorder:** Since the accident, she has been experiencing mood swings, irritability, fatigability, anxiety, and depression. Patient reports lack of motivation. I will monitor this patient. **Insomnia** The patient is unable to obtain meaningful sleep 1-2 times each week. She experiences fatigue as a result. I recommend she practice good sleep hygiene. **Post-traumatic vertigo and vestibular ataxia** Vestibular dysfunction has been shown to adversely affect processes of attention and increased demands of attention can worsen the postural sway associated with vestibular disorders. I recommend meditation, omega 3 vitamins, and substituting TV or Cell phone watching with stable visual activities such as reading. Central vertigo due to damage to vestibular nuclei in the brainstem after the head injury vs. peripheral vertigo such as benign paroxysmal positional vertigo. Neuro-otologic evaluation of her vertigo and brainstem functioning would be very valuable. I recommend this patient keep her eyes open when showering and to avoid walking in the dark. I will start the patient on Venlafaxine HCL ER 37.5 mg PO every day. **Cervical radiculopathy** Patient reports neck pain. I recommend she continue treatment with her physician. **Lumbar radiculopathy** Patient reports back pain and left shoulder pain. I recommend she continue treatment with her physician. **Post-traumatic tinnitus** Patient reports ringing in the ears. I recommend tinnitus maskers and soft background music to distract the patient from concentrating on the ringing in the ear. I will also start the patient on Hydrocortisone-Acetic Acid 1-2% ear drops for 10 days. I also recommend the patient have her hearing evaluated due to a decrease in her hearing. **Intention tremor** The patient experiences an intention tremor in her left hand when she reaches for objects. I recommend she use relaxation techniques to reduce her anxiety. I will re-evaluate her tremor at her next visit. If needed I will start the patient on Propranolol 20 mg PO TID. I will follow up with this patient in one month.	

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		Orders: Audiology for hearing loss. **Related records:** Order form, referral form and future medical report	
MM/DD/2019	XXX Institute Huma XXX, M.D.	**Neuropsychological assessment for traumatic brain injury:** **Reason for Referral:** Patient was referred to me for a Neuropsychological Assessment Battery due to suspected cognitive decline secondary to Traumatic Brain Injury. The results will elucidate her current level of functioning to facilitate diagnostic decision making, management, and treatment planning. **Presenting Problems:** Patient suffered from a blunt force trauma accident on MM/DD/2018. She was in a department store returning clothing from a dressing room when she struck her head on an iron pole. The impact caused a laceration to her forehead. It also caused her to move in a sudden backwards motion. She experienced loss of consciousness. She experienced dizziness, a headache, and neck pain. She did not immediately go to the ER. She went home and applied ice to her head and neck. She experienced a post-traumatic headache for several days after the incident. Since the accident, she experiences post-traumatic headaches reaching an intensity of 8/10, occurring 3-4 times a week, lasting for 3 hours. Her headaches originate in her frontal lobe, radiating to her occipital lobe. She described her headaches as having a sharp/burning sensation. Stress and watching TV triggers her headaches. She has taken Ibuprofen and Aleve which provide partial relief. She experience bilateral ringing in her ears. She reports that her hearing has become worse since the incident. She currently wears bilateral hearing aids. In addition, she experiences vestibular ataxia, causing her to stabilize herself when walking. She sits frequently when walking, due to a concern of falling. She has not experienced a fall. She experiences neck pain, left shoulder pain, and back pain. Her neck pain reaches an intensity of 5/10, left shoulder pain reaches an intensity 6/10, and her back pain reaches an intensity of 9/10. She has received cervical and lumbar epidural steroid injections. She experiences a burning sensation in her left shoulder. In addition, she experiences a tremor in her left hand, with decreased strength. Her tremor is more noticeable when she reaches for objects. Anxiety increases her tremor. Since the accident, she has exhibited signs of neuro-cognitive dysfunction. She is unable to remember her intentions and complete her tasks. She has short-term memory deficits and attention deficits. She is also suffering from delayed calculation abilities, visual deficits, auditory deficits, easy fatigability, irritability, anxiety, depression, and insomnia. She struggles with recalling events of the previous day. She has trouble holding a conversation. Questions must be repeated multiple times. Her ability to concentrate, focus, and pay attention to a situation has been damaged. Her daughter reports that her temper	114-132, 134-162

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		has become short, causing her to say things she doesn't mean. She is unable to maintain her focus for more than 10 minutes. She suffers from insomnia, experiencing difficulty falling asleep 1-2 times weekly, increasing her fatigue. **Background Information:** Patient was born and raised in XXX, XX. She completed elementary, middle, and high school. She graduated form XX High School, in YYYY. She considers her childhood to have been relatively happy, despite her mother passing away at during childbirth. Per her mother's last request, she was raised by her Aunt and Grandmother. At the age of 10, she went to live with her father. He remarried, giving her a wonderful stepmother who raised her as her own. She had her first son when she was 19-years-old. She continued living with her father and stepmother. They gave her the support she needed to be able to work and support her son. In 1961, she moved to XX, XX in search of better career opportunities. During her move she was pregnant with her daughter. She worked for XX Hospital. She retired after YY years of employment. She had another 3 children, being the sole provider for her family. She was able to help raise her grandchildren. She has always been a very cheerful outgoing independent woman with a lot of patience, but since the blunt trauma of XX 2018, she has not been the same. She suffers from memory gaps where she will argue about an event that has happened but she has no recollection of her word finding difficulties make it harder to communicate what she's trying to say as well as losing her train of thought mid conversation and forgetting the point of her sentence. She admits to having severe mood swings that make her seem hateful. She states she's catches herself snapping back at everybody even her grandbabies which she would never have done that in the past. In an effort to protect her loved ones from her mood swings, she now secludes herself as much as she can. She used to be a very active, especially since she was in a basketball team while in school and kept herself fit. She now cannot stand a lot of walking and even going shopping with her family tires her out very quickly. She remembers going to Fiesta XX with her family and being able to comfortably keep up with her grandkids. She now suffers from tremors on her left arm and hand as well as a burning sensation on her left shoulder and neck which she has to endure daily. She now finds herself physically, cognitively and emotionally handicapped since not a day goes by that she can complete without suffering from some deficits or pain. **Mental Health History:** She does not have any history of mental health problems. **Educational History:** She Graduated from XX High School in XXX XX in 1985. She is certified as a Unit Secretary, Lobotomist and Nurse's Assistant. **Occupational History:** She retired from XX Hospital after YY years. **Social History:** She is a single woman with five adult children with whom she	

<table>
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has had good relationships with. However, as mentioned above, since the blunt trauma accident of MM/DD/2018 and the resultant deleterious effects on her cognition and behavior, her interpersonal relationships with her family members are under strain and continue to deteriorate.

Test of Premorbid Functioning Score Summary:
Raw score: 28
Qualitative Description: Average

Behavioral Observations: She presented as a casually dressed, well-groomed woman wearing velvet pants, a gray shirt, and black tennis shoes. Her hearing and vision were adequate for the purpose of the assessment, although she did ask me to speak slower and louder.

She scored 48/50 on Trial 1 and 50/50 on Trial 2 on the Test of Memory Malingering (TOMM) Test. The TOMM Test is the test of memory malingering. Her TOMM Test results fall within the valid range. She had difficulty processing the verbal instructions. Each test instruction was repeated to her several times. She was suffering from word finding difficulties and confusion throughout the assessment, she kept saying, “I don’t understand what you are saying”. She was fully oriented to time, place, and person. The results of several embedded and free-standing performance validity measures fell within normal limits, indicating that her baseline cognitive capacity renders the results of the subsequent testing valid. In other words, the present data provide an accurate representation of her current level of Neuropsychological functioning.

I make these statements with a reasonable degree of medical probability, and caring for patients with various brain disorders, including TBI. Should any additional information become available to me in this case other than what I have received, I reserve the right to alter or adjust the opinions expressed above.

Abnormal Domains of the Neuropsychological Assessment Battery from NAB:
Attention:
<table>
<tr><th>Test</th><th>Interpretive category</th></tr>
<tr><td>Digits Forward</td><td>Mildly Impaired</td></tr>
<tr><td>Digits Forward Longest Span</td><td>Below Average</td></tr>
<tr><td>Digits Backward</td><td>Below Average</td></tr>
<tr><td>Digits Backward Longest Span</td><td>Mildly-to-Moderately Impaired</td></tr>
<tr><td>Dots</td><td>Mildly-to-Moderately Impaired</td></tr>
<tr><td>Numbers and Letters
Part D Efficiency</td><td>Mildly Impaired</td></tr>
<tr><td>Driving Scenes</td><td>Mildly-to-Moderately Impaired</td></tr>
</table>
Language:
<table>
<tr><th>Test</th><th>Interpretive category</th></tr>
<tr><td>Oral Production</td><td>Mildly Impaired</td></tr>
</table>
</td><td></td></tr>
</table>

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Auditory Comprehension	Moderately-to-Severely Impaired
Naming	Moderately Impaired
Reading Comprehension	Severely Impaired
Writing	Below Average
Writing Syntax	Severely Impaired
Writing Conveyance	Mildly Impaired
Billing Payment	Mildly Impaired

Memory List Learning:

Test	Interpretive category
List Learning List A Trial 1 Immediate Recall	Mildly Impaired
List Learning List A Trial 2	Below Average
List Learning List A Trial 3 Immediate Recall	Mildly Impaired
List Learning List A Immediate Recall	Mildly Impaired
List Learning List B Immediate Recall	Mildly-to-Moderately Impaired
List Learning List A Long Delayed Recall	Below Average
List Learning List A Percent Retention	Below Average
List Learning List A Long Delayed Forced-Choice Recognition	Moderately Impaired
List Learning List A Long Delayed Forced-Choice Recognition False Alarms	Mildly Impaired
List Learning List A Discriminability Index	Mildly Impaired

Memory Shape Learning:

Test	Interpretive category
Shape Learning Trial 1 Immediate Recognition	Mildly Impaired
Shape Learning Trial 2	Mildly-to-Moderately Impaired

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Immediate Recognition	
Shape Learning Trial 3 Immediate Recognition	Severely Impaired
Shape Learning Immediate Recognition	Moderately-to Severely Impaired
Shape Learning Delayed Recognition	Below Average
Shape Learning Delayed Forced-Choice Recognition	Mildly Impaired
Shape Learning Delayed Forced-Choice Recognition False Alarms	Mildly Impaired
Shape Learning Discriminability Index	Below Average

Memory Story Learning:

Test	Interpretive category
Story Learning Trial 2 Phrase Unit	Below Average
Story Learning Phrase Unit Immediate Recall	Below Average
Story Learning Trial 2 Thematic Unit	Mildly Impaired
Story Learning Phrase Unit Delayed Recall	Below Average
Story Learning Thematic Unit Delayed Recall	Mildly Impaired

Daily Living Memory:

Test	Interpretive category
Daily Living Memory Immediate Recall	Below Average
Daily Living Memory Delayed Recall	Mildly-to-Moderately Impaired
Daily Living Memory Retention	Below Average
Daily Living Memory Delayed Recognition	Mildly Impaired
Daily Living Memory Recall vs. Recognition	Mildly-to-Moderately Impaired

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Medication Instructions Immediate Recall	Below Average
Medication Instructions Delayed Recall	Mildly Impaired
Medication Instructions Delayed Recognition	Severely Impaired
Name/Address/Phone Immediate Recall	Mildly Impaired
Name/Address/Phone Delayed Recall	Severely Impaired
Name/Address/Phone Delayed Recognition	Below Average

Visuospatial Functions:

Test	Interpretive category
Visual Discrimination	Mildly Impaired
Design Construction	Mildly-to-Moderately Impaired
Figure Drawing Copy Organization	Mildly Impaired
Figure Drawing Copy Planning	Severely Impaired
Figure Drawing Immediate Recall	Moderately-to-Severely Impaired
Figure Drawing Immediate Recall Organization	Mildly-to-Moderately Impaired
Figure Drawing Immediate Recall Fragmentation	Mildly Impaired
Figure Drawing Immediate Recall Planning	Severely Impaired
Figure Drawing Percent Retention	Severely Impaired
Map Reading	Mildly-to-Moderately Impaired

Executive Functions:

Test	Interpretive category
Mazes	Mildly Impaired
Judgment	Below Average
Categories	Below Average
Word Generation	Mildly Impaired

CNS VS Abnormal Domains:

Test	Interpretive category
Neuro-cognition	Low Average

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Composite Memory	Very Low
Verbal Memory	Very Low
Visual Memory	Low Average
Psychomotor Speed	Low
Cognitive Flexibility	Low Average
Executive Function	Low Average
Simple Attention	Low
Motor Speed	Very Low
Finger Tapping Right	Low Average
Finger Tapping Left	Very Low

Depression, Anxiety, and Insomnia Scale:

Self Reported Symptoms	Score	Interpretive Category
Depression	7	Normal - Controlled with medication
Anxiety	11	Mild
Insomnia	14	Severe

NAB index score summary table:

Module index	Interpretive Category
Attention Index (ATT)	Above average
Language Index (LAN)	Moderately impaired
Memory Index (MEM)	Mildly impaired
Spatial Index (SPT)	Mildly impaired
Executive Functions Index (EXE)	Mildly impaired
Total NAB Index (T-NAB)	Mildly impaired

Epworth sleepiness scale (ESS):
Total score: 14

How much pain do you feel right now? 3

Pittsburgh Sleep Quality Index Report:
Total score: 13

Diagnoses:

- Moderate Neuro-cognitive Deficits due to Traumatic Brain Injury
- Depression
- Generalized Anxiety Disorder
- Post-Traumatic Headache
- Bilateral Motor Weakness of Hands
- Post-Traumatic Vestibular Dysfunction
- Insomnia

Summary: Patient was born and raised in XXX, XX. She completed elementary, middle, and high school. She graduated form XX High School, in YYYY. She considers her childhood to have been relatively happy, despite her

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		mother passing away at during childbirth. Per her mother's last request, she was raised by her Aunt and Grandmother. At the age of 10, she went to live with her father. He remarried, giving her a wonderful stepmother who raised her as her own. She had her first son when she was YY-years-old. She continued living with her father and stepmother. They gave her the support she needed to be able to work and support her son. In 1961, she moved to XX, XX in search of better career opportunities. During her move she was pregnant with her daughter. She worked for XX Hospital. She retired after 25 years of employment. She had another 3 children, being the sole provider for her family. She was able to help raise her grandchildren. She suffered from a blunt force trauma accident on MM/DD/2018. She was in a department store returning clothing from a dressing room when she struck her head on an iron pole. The impact caused a laceration to her forehead. It also caused her to move in a sudden backwards motion. She experienced loss of consciousness. She experienced dizziness, a headache, and neck pain. She did not immediately go to the ER. She went home and applied ice to her head and neck. She experienced a post-traumatic head for several days after the incident. Since the accident, she experiences post-traumatic headaches reaching an intensity of 8/10, occurring 3-4 times a week, lasting for 3 hours. Her headaches originate in her frontal lobe, radiating to her occipital lobe. She described her headaches as having a sharp/burning sensation. Stress and watching TV triggers her headaches. She has taken Ibuprofen and Aleve which provide partial relief. She experience bilateral ringing in her ears. She reports that her hearing has become worse since the incident. She currently wears bilateral hearing aids. In addition, she experiences vestibular ataxia, causing her to stabilize herself when walking. She sits frequently when walking, due to a concern of falling. She has not experienced a fall. She experiences neck pain, left shoulder pain, and back pain. Her neck pain reaches an intensity of 5/10, left shoulder pain reaches an intensity 6/10, and her back pain reaches an intensity of 9/10. She has received cervical and lumbar epidural steroid injections. She experiences a burning sensation in her left shoulder. In addition, she experiences a tremor in her left hand, with decreased strength. Her tremor is more noticeable when she reaches for objects. Anxiety increases her tremor. Since the accident, she has exhibited signs of neuro-cognitive dysfunction. She is unable to remember her intentions and complete her tasks. She has short-term memory deficits and attention deficits. She is also suffering from delayed calculation abilities, visual deficits, auditory deficits, easy fatigability, irritability, anxiety, depression, and insomnia. She struggles with recalling events of the previous day. She has trouble holding a conversation. Questions must be repeated multiple times. Her ability to concentrate, focus, and pay attention to a situation has been damaged. Her daughter reports that her temper	

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		has become short, causing her to say things she doesn't mean. She is unable to maintain her focus for more than 10 minutes. She suffers from insomnia, experiencing difficulty falling asleep 1-2 times weekly, increasing her fatigue. Her Neuropsychological Assessment Battery reveals moderate cerebral dysfunction. She demonstrates poor intellectual functioning, impaired visuospatial/visuoconstructional skills, decreased working memory, damaged memory for story material, impaired visual memory, impaired complex sequencing, poor graphic pattern regeneration, and the impaired ability to establish, shift, and maintain set. She also shows mild weakness in finger tapping bilaterally. This is indicative of overall motor slowing. Learning and recall was poor. For the first time in her life, she is clinically depressed. In addition to this depression, she demonstrates anhedonic and anxious mood. She also suffers from severe insomnia, and the resultant sleep deprivation exacerbates all other impaired neuro-cognitive functions. Her Neuropsychological Assessment Battery shows deficits in higher cortical function, including but not limited to: **Motor impairment:** Difficulty in manipulating her hands for writing, typing, computer, or tool usage. Limited speed to perform clerical error checking tasks with respect to numerical and verbal data: overall scores demonstrate a limited capacity to perform similar tasks. Patient performed very low in bilateral finger tapping, indicating motor slowing. **Attention deficits:** She demonstrates deficits in auditory attentional capacity, working memory for orally presented information, everyday living, working memory, visual scanning, attention to detail, and selective attention. Tasks that included planning, organization skills, foresight, judgment, and self-regulation showed mild impairment. **Limited ability to solve two-dimensional spatial perception problems:** She has difficulty completing tasks that required visuoperceptual, visuospatial, and visuoconstructional accuracy. Her attention span is decreased. She has impairment of working memory and executive dysfunctions. She demonstrated a decreased aptitude to be involved in mechanical, technical, or artistic occupation. **Language:** She demonstrates moderate deficits in auditory comprehension. She also demonstrates deficits in language, naming abilities, and writing abilities. **Memory deficits:** Her scores are mildly impaired in short-term episodic memory, visual memory, immediate and delayed recall. Memory pathways are damaged. New ones will be difficult to form without Neuro-rehabilitation. **Impaired visuospatial/constructional skills:** She had difficulty completing tasks that required visuoperceptual, visuospatial, and visuoconstructional accuracy. In addition, she has a decreased attention span. She has an	

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		impairment of working memory and executive dysfunctions. She cannot copy simple drawings and does not exhibit proper visual scanning when driving. This indicates that the pathways between the eyes, cerebral cortex, and cerebellum are damaged. **Contextual memory:** When contextual memory was assessed, she exhibited mildly diminished abilities. This indicates that in daily activities, such as when at a doctor's appointment or in an academic work setting, she is now more likely to miss details of conversations and discussions that she participates in currently. Her results indicate a diminished ability to multitask simultaneously. The decline in contextual memory skills explains her current cognitive complaints post-injury. She clearly lacks self-confidence, since she is not functioning at the level she was prior to the accident. Impaired visual memory. **Poor intellectual functioning:** She demonstrates moderate deficits in conflict management, problem solving, teamwork, Interpersonal skill, managerial skills, and leadership skills. **Impaired complex sequencing:** She is unable to perform tasks in the correct order or sequence. **Poor graphics pattern regeneration:** Patient has a moderate impairment of redrawing of a design from memory. This shows impairment of her visuoconstructional skills and executive functioning. Impaired ability to establish, shift, and maintain set representing cognitive rigidity: She has a impairment in the ability to switch between thinking about two different concepts and to think of multiple concepts simultaneously. In summary, she was a normally functioning woman until she suffered the blunt force trauma accident on MM/DD/2018 she now suffers from numerous deficits - Cognitive, psychiatric, psychological, emotional, and physical. She has Neuro-cognitive deficits, and while improvements may be made, a majority of these deficits can become permanent. **Assessment and plan:** She needs Neuro-cognitive Rehabilitation to improve her immediate and delayed memory for words, immediate and delayed memory for designs, sustained attention, concentration, working memory, complex sequencing, poor judgment, reaction time, visual processing speed, learning memory, and focused attention. She is unable to remember her intentions and complete her tasks. She experiences delayed processing speeds, short-term memory deficits, attention deficits, delayed calculation abilities, reading/processing language difficulty, easy fatigability, irritability, anxiety, and depression. It is known that Cognitive Rehabilitation is the most effective immediately after sustaining a Traumatic Brain Injury with multidisciplinary team approach. Multidisciplinary team approach encompasses TBI specialist,	

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		Neuropsychologists, Speech-Language Pathologists, Occupational Therapists, Physical Therapist, and Social Workers. She would benefit from outpatient therapy with a Rehabilitation Psychologist, who can teach her additional coping mechanisms and compensatory strategies, on how to live with residual Cognitive Impairment Post-Traumatic Brain Injury. Cognitive rehabilitation consists of diverse interventions; however, there is a consensus in literature that cognitive rehabilitation must be tailored to individual needs. Cognitive rehabilitation therapy is divided into two components: Restorative and compensatory approach. The restorative approach aims at reinforcing, strengthening, or restoring the impaired skills. It includes the repeated exercise of standardized cognitive tests of increasing difficulty, targeting specific cognitive domains (e.g., selective attention, memory for new information). Compensatory approach teaches ways of bypassing or compensating for the impaired function. Various authors have reported the effective use of assistive technologies (AT), calendars, electronic memory devices, alarms, or reminders as compensatory techniques. She is a good candidate for pharmacological treatment of her post-traumatic headaches • **Medical Management:** I recommend continuing her on Topiramate (Trokendi XR) 50mg 1 tablet daily. I recommend she continue on Butalbital-Acetaminophen-Caffeine (Butalbital-APAP-Caffeine) 50-300-40mg 1 tablet every 4 hours. I recommend she continue Topiramate 25mg, 2 tablets one time daily • **Interventional Headache Management:** If the medical management fails, then the patient is recommended to have on a botulinum toxin A injection to improve the frequency and intensity of the post-traumatic headaches. I also recommend bilateral Greater and Lesser Occipital Nerve Block under Ultrasound-guidance and bilateral Third Occipital Nerve Block under fluoroscopy to further ameliorate the frequency and intensity of the post-traumatic headaches She suffers from insomnia. I recommend she practices good sleep hygiene. That she adopts habits and routines that are conducive to sleeping. She appears to be a good candidate for pharmacological treatment of her anxiety and major depressive symptoms. I recommend continuing her on Venlafaxine HCL (Venlafaxine HCL ER) 37.5mg, 1 tablet daily. Regular physical exercise is recommended for its beneficial effects on brain health, mood, and overall wellness. She has word finding difficulties and states that she will often mix up her words. I recommend an evaluation by a Speech Language Pathologist and speech therapy. She is suffering from post-traumatic vestibular dysfunction. I will order an MRI of the temporal bone and internal auditory canal with and without	

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		contrast to rule out abnormal anatomy or lesions. I recommend Vestibular Rehabilitation and Epley maneuver, to differentiate Central vs. Peripheral Vertigo. If Vestibular rehabilitation does not provide relief, then I recommend Meniett device. It is important that she continues to follow up with her providers, who can assist in addressing the array of complex injuries she received in the tragic and life-altering blunt force trauma accident. There is a correlation between pain and cognitive symptom presentation; hence, it is critical to note that her pain could be serving to aggravate her Neuro-cognitive impairments present in this evaluation. Patient is advised to take Neuro-cognitive recovery supplements as listed below: • Vitamin D 3000 IU daily with food • Fish Oil / Omega 3 Supplements 2-3 grams with food daily • Probiotic • Magnesium L Threonate 1-2 grams daily • Vitamin B12 1000 micrograms daily • Co-Enzyme Q10 100 mg daily • N-Acetyl Cysteine 150 mg daily • Zinc 20 mg daily • Alpha Lipoic Acid (ALA) 100 mg daily • Phosphatidylserine (PS) 100 mg daily • Glucoraphanin 15 mg daily **Neuro-rehabilitative exercises:** **The following exercises may partially restore/improve diminished brain functions:** Brain HQ Happy Neuron Lumosity Tactus Therapy Web Sudoku General stress management techniques including meditation, yoga, and massage therapy may be helpful. Compensatory strategies that may be useful for her to implement in her daily living include: • Allow more time to complete tasks to avoid time pressures • Utilize a day planner/calendar to record appointments and important future tasks • Write down and organize information to be remembered by carrying a small notebook and pen • Break up longer tasks into multiple, shorter tasks, and avoid multitasking. • Complete tasks in a quiet room, turning off televisions, or other distracting sources • If becoming fatigued or losing focus, stop and take a break before returning to the task	

<table>
<tr><th>DATE</th><th>PROVIDER</th><th>OCCURRENCE/TREATMENT</th><th>PDF REF</th></tr>
<tr><td></td><td></td><td>Patient reports bilateral ringing in the ears secondary to her Traumatic Brain Injury. I recommend Cognitive Behavioral Therapy, relaxation techniques, deep breathing exercises, and use of therapeutic sounds.

She will also benefit from Psychotherapy to encourage her to comply with medical management, practice coping techniques, and problem-solving skills.

Orders:
Orders for speech therapy, vestibular therapy, psychotherapy, neuro-cognitive rehabilitation and cognitive behavioral therapy.

Related records: Order form and referral form</td><td></td></tr>
<tr><td>MM/DD/2019</td><td>XX Solutions

Huma XXX, M.D.</td><td>Test of pre-morbid functioning:
Date of report: MM/DD/2019
Test performed:
Test of pre-morbid functioning (TOPF):

<table><tr><th>Raw score</th><th>Standard score</th><th>Percentile Rank</th><th>SEM</th><th>Quality Description</th></tr><tr><td>28</td><td>90</td><td>25.2</td><td>2.12</td><td>Average</td></tr></table>
Test of Premorbid Functioning Score Summary: Average.</td><td>163-164</td></tr>
<tr><td>MM/DD/2019</td><td>XXX Institute

Huma XXX, M.D.</td><td>Follow-up visit for traumatic brain injury:
Mechanism of injury: Blunt force trauma to the head

History of present illness: On MM/DD/2018 patient suffered from a blunt force trauma. She was in a department store returning clothing from a dressing room when she struck her head on an iron pole. The force of the impact caused her to move in a sudden backward motion and caused a laceration to her forehead. She had a loss of consciousness for a few seconds. She experienced dizziness, headache, and neck pain. She went home and applied ice to her head and neck for relief. She experienced a severe headache for several days following the impact that she describes as a burning sensation that encompassed her entire head.

She was seen for an initial evaluation on MM/DD/2018. At that time, she reported post-traumatic migraines of 8/10 in intensity that would last for 3 hours and would occur 3-4 times a week. Her migraines originated in her frontal lobe and radiated to her occipital lobe. She described her migraines as a sharp pain. She reported dizziness, ringing in her ears, trouble sleeping, fatigue, attention deficits, short term memory deficits, anxiety, and depression. Her daughter reported that she had become much more impatient and irritable. In addition, she reported neck pain with an intensity of 5/10; left shoulder pain with 6/10 intensity; and back pain with 9/10 intensity. She had epidural steroid injections in her neck and in her lower back for relief. She experienced a burning sensation in her left shoulder. She had an intention tremor in her left hand and a decreased strength in her left hand. She was prescribed Butalbital-Acetaminophen-Caffeine 50-300-40 mg PO every 4 hours as needed</td><td>225-240</td></tr>
</table>

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		Hydrocortisone-Acetic Acid 1-2% Three times a day for 10 days, Topiramate-XR 50 mg PO every day, and Venlafaxine HCL ER 37.5 mg PO every day. She was seen for a follow up visit on MM/DD/2019. She reported her headaches had improved and were down to 6-7/10 in intensity, occurring 3-4 times a week, lasting 3-4 hours each. She continued to report dizziness, trouble sleeping, fatigue, attention deficits, memory deficits, anxiety, and depression. Her tinnitus was resolved. She continued to report severe pain in her neck, back, shoulder, and intention tremors in her left hand. She was also started on Propranolol 20 mg PO Three times a day for her intention tremors. **She returned today for a follow up exam and she reports the following:** **Post-traumatic headaches/migraines:** She reports a significant improvement in her post-traumatic headaches. Her headaches are now only 3-4/10 in intensity, occurring once a week, and lasting only 30-45 minutes each. She reports that she stopped taking the prescribed medication about a month ago, because her headaches had gotten much more manageable. She no longer needs to take as needed medication, and reports that the headaches usually go away on their own. **Traumatic brain injury with neuro-cognitive deficits:** She continues to experience minor neuro-cognitive dysfunction. She reports most of her symptoms have resolved, however she occasionally has issues staying focused. **Depression and anxiety:** She reports an improvement in her mood. She has not been taking Venlafaxine HCL ER 37.5 as prescribed as her mood is improving without medication. **Vestibular ataxia:** She reports her symptoms have resolved. **Insomnia:** She reports improvement in her sleep. She is now able to fall asleep quicker, and get back to sleep quickly if she wakes up in the middle of the night. **Generalized body pain:** She continues to report neck pain; left shoulder pain with 9/10 intensity; and back pain with 8-9/10 intensity. She continues to experience a burning sensation in her left shoulder. She reports a minor tear in her left shoulder. **Blurred Vision:** She reports very infrequent episodes of blurred vision. She reports this occurs about twice a month, lasting several seconds each. **Review of system:** **Cardiovascular:** The patient reports high blood pressure. **Musculoskeletal:** The patient reports neck pain, back pain, and left shoulder pain. She denies arm, buttock, thigh or calf cramps. No other joint or muscle pain. No muscle weakness or tenderness. No joint swelling. **Neurologic:** The patient reports post-traumatic headaches, dizziness, and short term memory loss. She denies fainting, muscle spasm, loss of consciousness,	

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		sensitivity or pain in the hands and feet. **Physical exam:** In general, the patient is sitting in a chair and demonstrates discomfort. **Spine:** Without scars, or scoliosis; pelvis/hips are normal to exam. Straight leg raising test is positive bilaterally. **Mood:** She was anxious and emotional during the interview. **Speech:** Patient can appropriately name objects. She does not appear to repeat phrases. She has spontaneous speech. **Cranial nerve VIII** has decreased hearing to finger rub bilaterally. Patient wears bilateral hearing aids. **Motor:** There is no pronator drift of outstretched arms. Muscle bulk and tone are normal. Strength is decreased in her left hand at 4/5. **Gait:** Posture is normal. Patient is unable to perform tandem gait, unable to walk on toes, and unable to walk on heels with eyes open or with eyes closed due to imbalance. She almost fell when performing tandem gait with eyes closed. Romberg is negative. **Adventitious movements:** Patient has an intention tremor in her left hand. No myoclonus, tics, dystonia or fasciculations are noted during this exam. **Assessment and plan:** **Post-traumatic headaches/migraines** When she first started prophylaxis of her post-traumatic migraines, she was experiencing headaches of 8-9/10 intensity, 3-4 times a week, lasting 3-4 hours each. Her post-traumatic headaches have improved significantly since then, and are now much less frequent and less intense. She has stopped taking the prescribed medication as of a month ago and her headaches have not gotten worse. I will discontinue her on prophylaxis of post-traumatic headaches and continue to monitor her condition. **Traumatic brain injury with neuro-cognitive deficits** Since the accident, she is suffering from neuro-cognitive deficits. The following areas are presumably affected: Memory, learning, intelligence, language, calculation, visual and spatial analysis, problem solving, judgment, abstract thinking and executive functions. I will continue the patient on neuro-rehabilitative exercises (listed below) to improve her neuro-cognitive deficits. Patient is required to do these neuro-rehabilitative exercises on a daily basis. The patient is also advised to keep a log of progress and the numbers of hours spent engaged in these exercises. **Neuro-rehabilitative exercises:** **The following exercises may partially restore/improve diminished brain functions:** Brain HQ Happy Neuron Lumosity Tactus Therapy Web Sudoku	

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		Stress management General stress management techniques including meditation, yoga, and massage therapy may be helpful. Compensatory strategies that may be useful for her to implement in her daily living include: • Allow more time to complete tasks to avoid time pressures • Utilize a day planner/calendar to record appointments and important future tasks • Write down and organize information to be remembered by carrying a small notebook and pen • Break up longer tasks into multiple, shorter tasks and avoid multitasking • Complete tasks in a quiet room, turning off televisions or other distracting sources • If becoming fatigued or losing focus, stop and take a break before returning to the task **Neuropsychological assessment battery:** Comprehensive test/assessment of the patient's brain functions: Attention, processing speed, learning, memory, intelligence, language, sensory acuity, calculation, visuospatial ability, problem solving, judgment, abstract thinking, mood, and temperament. Should be performed 6 months or greater status post injury. She participated in this assessment on MM/DD/2019. **Neuro-cognitive recovery supplements:** • Vitamin D 3000 IU daily with food • Fish Oil / Omega 3 Supplements 2-3 grams with food daily • Probiotic • Magnesium L Threonate 1-2 grams daily • Vitamin B12 1000 micrograms daily • Co-Enzyme Q10 100 mg daily • N-Acetyl Cysteine 150 mg daily • Zinc 20 mg daily • Alpha Lipoic Acid (ALA) 100 mg daily • Phosphatidylserine (PS) 100 mg daily • Glucoraphanin 15 mg daily **Depressive disorder/generalized anxiety disorder** Since the accident, she has been experiencing mood swings, irritability, fatigability, anxiety, and depression. Patient reports lack of motivation. She reports improvement without medication. I will monitor this patient. **Insomnia** The patient has minor difficulty staying asleep. Educational handout on sleep hygiene provided to the patient. **Post-traumatic vertigo and vestibular ataxia** Vestibular dysfunction has been shown to adversely affect processes of	

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		attention and increased demands of attention can worsen the postural sway associated with vestibular disorders. I recommend meditation, omega 3 vitamins, and substituting TV or Cell phone watching with stable visual activities such as reading. Her balance and dizziness has significantly improved by performing the vestibular exercises at home. She is advised to continue those exercises at home. **Cervical radiculopathy:** Patient reports neck pain. I recommend she continue treatment with her physician. **Lumbar radiculopathy:** Patient reports back pain and left shoulder pain. I recommend she continue treatment with her physician. **Post-traumatic tinnitus:** Patient reports that her symptoms have resolved. I have instructed the patient to return should her symptoms return. **Blurred vision** Patient reports infrequent episodes of blurred vision and light headedness. I recommend the patient see a cardiologist as the condition may be caused by a low heart rate. **Referral:** To cardiologist. **Related records:** Order form and referral form	
MM/DD/2019	XXX Institute Huma XXX, M.D.	**Follow-up visit for traumatic brain injury:** Patient no longer taking the prescription, stopped about a month ago. She reports that the medication helped treat her symptoms and she stopped taking them for that reason. **Sleep** - Patient reports improvement with her sleep. Patient reports that she goes to sleep and wakes up occasionally to use the restroom but doesn't have trouble falling back asleep **Headaches** - Patient reports headaches once a week, doesn't know if its allergies or something else. She reports headaches reach a 3 or 4/10. Last around 25 to 35 minutes **Dizziness** - Patient reports that she felt lightheaded yesterday, she reports feeling it occasionally Patient denies ringing in the ears. **Attention** - Patient reports that attention has improved but every now and then she will have trouble paying focus. **Mood swings** - Patient reports improvement in her mood	241-245

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		Body pains - Patient still reports her left shoulder/neck still feels like a burning sensation, which happens sparingly, it can range in intensity of pain. She has a small tear in her left shoulder. Doctor told her it wasn't enough for surgery, but she reports the accident worsened the pain from the shoulder. Happens when she's sitting in one position for a very long time. She still reports that she can't stand for a long period of time due to the pain in her back. Back pain is about 8-9/10. She has had injections in her neck and back, and has helped a bit but she still reports the pain. Pain in back will keep her from standing for long periods of time Patient no longer reports loss of appetite.	