Jack Doe
37 Y.O. Male, DOB: 6/31/1987
Record ID:XXXX
1111 Client Lane
Salt Lake City, UT 84000

Exam Date: 07/07/2024

DOI: 06/10/2024

Chief Complaint: Left rib pain, right mid-back pain, bilateral hip pain, visual changes, dizziness, neck pain, cognitive changes, emotional lability, and low back pain following a rear-end accident on 6/10/2024.

History of Present Illness: Jack is a 27-year-old man who was stopped at a rear light with one of his children strapped into the front passenger seat. He looked in his rear-view mirror and saw that a passenger truck behind him was not going to stop in time. The estimated impact was 40-50 mph". He denies LOC but he did feel dazed and most of the details of the incident are fuzzy, except that he was worried about his child in the back seat of the car. After checking on his daughter, Jack got out of his car but within a short period of time he noticed intense neck pain as well as back pain between his spine and scapula, and a severe headache. Within hours he noticed increasingly severe hip pain, ringing in his ears, visual changes, dizziness, and neck and low back pain. Over the ensuing few days, he was experiencing cognitive changes and was emotionally labile, and experienced a moderate headache associated with phono- and photophobia. Specific symptoms are listed below. Jack was seen in the ER at Riverton Hospital on the date of the accident and was diagnosed with:

1. Cervical strain
2. Intercostal muscle strain
3. Contusion, hip
4. Floaters
5. MVC

Prior to the accident, Jack was very active and enjoyed kayaking, running and working out. He has three children at home, and he attends school and works full-time. These activities have become considerably more difficult since his accident as he has trouble focusing and has a headache every day. The headaches occur after moderate amounts of loud noises, bright lights, and prolonged computer use. He works on a computer all day for his job and school and has never had issues before. Now he loses concentration and gets a headache within hours of computer use. If his son starts crying, his headache is instantly triggered. Jack reports his pre-existing anxiety, PTSD, and depression have worsened, and he has been experiencing nightmares and flashbacks regarding the accident.

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Symptoms/Frequency:

Concussion/BI Symptoms:					
Headaches	1-3x/week	Pressure in head	Never	Neck pain	Daily
Nausea/Vomiting	Never	Dizziness	1-2x/week	Blurred vision	Daily
Balance problems	Never	Photophobia	Daily	Phonophobia	Daily
Feeling slowed down	Daily	Feeling like “in a fog”	Daily	Difficulty concentrating	Daily
Difficulty remembering	Daily	Fatigue/Low energy	Daily	Confusion	Never
Drowsiness	1-3x/week	Emotional lability	4-6x/week	Irritability	1-4x/week
Sadness	4-6x/week	Nervous/anxious	Daily	Sleep disturbance	Daily
				Symptoms Severity Score	**89/126**
				Total # Symptoms	**17/21**

Daily = 6 4-6 x/week = 5 1-3 x/week =4 1-3 x/month = 3 4-11 x/year = 2 1-3 x/year =1 Never = 0

Medications:
Related:

- None

Unrelated:

- Amphetamine-dextroamphetamine XR 15 mg qd
- Gabapentin 400 mg qd
- Sertraline 100 mg qd

Allergies:

- NKDA.

Past Medical History:

- Post-traumatic stress disorder (PTSD)
- Anxiety
- Depression
- Attention-deficit hyperactivity disorder (ADHD)
- Hip pain after marathon.

Past Surgical History:

- None

Social History:

Marital/Relationship status:	Never married √ Married Separated Divorced Widow Domestic Partner. Wife – Jill. 10 years	
Children:	3; Kylie (12), Preston (15 mos.), Danny (14)	
Pets:	Dog x2. Cat x1	
Living situation:	Lives in a home. Owned.	√ Safe √ Food √ Heat/Cool √ Smoke detectors √ CO detectors
Education:	High school graduate. Has bachelor's degree in engineering. Currently in masters program for business management – University of Utah.	
Employment:	Works 40 hrs./week as project engineer for Tech7 Enterprises	
Hobbies:	Kayaking, running, working out, listening to music. All have been negatively affected by his injuries	
BADLs: (Check ADLs pt. can do independently.	√ Eating √ Bathing √ Dressing √ Transfers √ Toileting √ Ambulating √ Grooming	
IADLs: (Check IADLs pt. can do independently).	√ Communication √ Transportation √ Meal prep. √ Shopping √ Housework √ Med. Mgt. √ Finances	
Eating habits:	Eats pescatarian diet, no restrictions. No religious restrictions. Denies food allergies. Drinks caffeinated drinks – coffee and soda.	
Exercise habits:	Used to work out daily but has been unable to maintain an exercise schedule since the accident. Has had to stop running because of his injuries.	
Alcohol:	Rarely, socially	
Tobacco/Vape	Never vaped. Never smoked.	
Drugs/Substance Abuse:	Has a medical marijuana card and uses 2x/week for anxiety and PTSD. Denies illicit or abuse of Rx drugs.	

Immunization History:

UTD with immunizations. Was not immunized against COVID-19.
No flu shot.
Last TD 2 years ago.

Significant Family History:
Father – Deceased. Pancreatic cancer.
Mother – Alive. Anxiety, ADHD.
Sister (35) – Alive – ADHD
Brother (32) – Alive – Fibromyalgia, PTSD, anxiety, depression
Sister (24) – Alive and well. No dx.
Maternal GM – Deceased. Heart attack.

ROS:
GENERAL: + pain, - fever/chills, + malaise, + fatigue, - night sweats, + changes in sleep patterns, - weight changes.
SKIN, HAIR AND NAILS: Denies rash or eruptions, itching, change in texture and pigmentation, excessive sweating, abnormal hair or nail growth.
HEAD: + occasional headaches, + dizziness, - severe head injuries, + concussion, - period of LOC
EYES: + blurring, - diplopia, - pain, + recent change in appearance or vision, - glaucoma, - use of eye drops, - history of eye trauma. + photophobia related to headaches.
EARS: Denies hearing loss, pain, discharge, vertigo, infections. + phonophobia with headaches, + tinnitus.
NOSE: Denies change in sense of smell, frequent colds, obstruction, congestion, epistaxis, postnasal discharge, sinus pain.
THROAT AND MOUTH: Denies hoarseness or change in voice, frequent sore throats, bleeding or swelling of gums, recent tooth abscesses or extractions, soreness of tongue or buccal mucosa, ulcers, change in taste. Sees the dentist every 8 months. Does not recall last visit.
LYMPH NODES: Denies enlargement, tenderness, suppuration.
CV: Denies chest pain, palpitations, dyspnea on exertion, orthopnea, edema, HTN, previous MI.
PERIPHERAL VASCULATURE: Denies claudication, thrombosis, thrombophlebitis.
HEMATOLOGIC: Denies anemia, tendency to bruise or bleed, known blood disorders or cancer.
RESP: Denies pleuritic pain, dyspnea, cyanosis, wheeze, cough, sputum, hemoptysis, night sweats, exposure to tuberculosis, known exposure to COVID-19 in last 6 months.
GI: Reports good appetite. Denies indigestion, food intolerance, dysphagia, heartburn, nausea, vomiting, hematemesis. Reports regular bowel habits; denies constipation, diarrhea, incontinence, change in stool color or consistency, flatulence, hemorrhoids. Denies history of jaundice, gastric ulcers, gallstones, polyps, GI tumors.
ENDOCRINE: Denies thyroid pain or enlargement, heat or cold intolerance, unexplained weight change, polydipsia, polyuria, change in hair distribution and coarseness, increased hat or glove size, skin striae.
GU: Denies dysuria, flank or suprapubic pain, urgency, frequency, nocturia, hematuria, polyuria, dark or discolored urine, hesitancy, dribbling, loss of force of stream, passage of stone. Denies edema of face. Denies stress or other incontinence, hernias, STIs, presence of implants or catheters. Recently treated for UTI – resolved.

For people assigned male at birth:
Puberty: ~14
Difficulty with erections: Denies
Difficulty ejaculating: Denies
Testicular pain: Denies
Change in libido: Denies
Infertility: Denies
Pain with intercourse: Denies

MS: Denies swelling, redness, heat, bony deformity. - discomfort in sternum, + neck pain, + thoracic pain, + lumbar pain, - bilateral knee pain, - sacroiliac pain, + restricted ROM in spine, + hip pain.

	Cervical spine	Thoracic spine	Lumbar spine
Rate pain now	4-5/10	7/10	6/10
Worst pain level	7/10	10/10	7/10
Best pain level	0/10	5/10	3/10
Describe pain	6/10 pain with side-to-side rotation; 0/10 pain forward to back	Sharp, ache, stabbing, constant	Sharp, dull, ache, stabbing, intermittent, constant + radiculopathic symptoms bilateral
What improves sx?	Rest	Stretching, lying down	Rest, ibuprofen
What makes sx worse?	Activity	All activity	Bending over

PSYCH: + depression, + mood changes, + difficulty concentrating, + anxiety, + agitation, - tension, - suicidal ideation, + irritability, + sleep disturbances.
NEURO: Denies syncope, + seizures, - weakness, - paralysis, + changes in sensation BLE, - changes in coordination, - tremors, + memory loss, +cognitive changes, + dizziness, + headaches, + foggy thinking.

Physical Exam:
Vital Signs:
Ht: 71 inches, Wt. 170 lbs., Temp: 98.8., HR: 79, RR: 15, BP: 110/68, SpO2: 98%, BMI: 23.71.

GENERAL: Well-developed, well-nourished, in no apparent distress, very pleasant.
HEENT: Normocephalic, atraumatic; no abnormalities of external ear, TMs appear grey and pearly with all landmarks noted; clear conjunctiva, EOMI bilaterally, PERRL; oral mucosa is pink and moist, posterior nasopharynx without erythema, exudate or lesions.
CV: RRR, normal S1S2, no murmurs appreciated.
RESP: Lungs clear to auscultation bilaterally. No wheezes, rhonchi, rales. No resp. distress.
Skin: Warm, dry, color appropriate for race, intact. No rashes or bruising in exposed areas.
MS: No joint pain with ROM, no stiffness, full ROM BUE and BLE.
Cervical spine: + cervical spine pain to palpation, bilateral rotation, and bilateral lateral bend, + Spurling test; + severe pain t-spine with palpation between T3-8 laterally to scapula. Area swollen and ↓ ROM in thoracic spine; + mod pain lumbar spine with bending, twisting, between L4-5. + left rib pain.

Radiological Findings:
MRI Lumbar spine without contrast on 6/23/2024:
1. Mild-to-moderate disc narrowing/desiccation and 4 mm AP dorsal protrusion with high intensity fissure abuts the S1 root sleeves. 5
2. Small amount of R>L facet joint fluid at L4-L may be physiologic or represent small effusion, without other signs of arthropathy.
3. Mild right asymmetric disc narrowing/desiccation at L3-4, with ventral high intensity fissure and bulge, causing no stenosis or impingement.

MRI cervical spine without contrast, whiplash protocol on 6/23/2024:
1. Disc bulge at C4-5, C6-7, with no herniation, stenosis, neural impingement or facet arthropathy.
2. No evidence of degenerative spondylolisthesis at C2-C5, as reported on x-rays from 6/15/2024. AP translation at C2-3 through C5-6 on those x-rays is at least partially physiologic, slightly greater at C3-4, where findings are consistent with some hypermobility.
3. Slight disc desiccation/narrowing and partial thickness ventral annular fissure at T2-T3.
4. Suboptimal assessment of alar ligaments due to technical factors, but likely no more than grade I signal abnormality in the alar ligaments.

PSYCH: GAD 7 = 19, PDQ-9 = 21.
NEURO: MMSE: 30/30
CNS Vital Signs Report reveals deficits in verbal memory, psychomotor speed, and motor speed.
KD Eye Tracking System reveals severe deficits in eye tracking. Please see attached report.

Cranial Nerves:
CNI: Olfactory: Tested with vanilla and coffee - intact.
CN II: Optic – Snellen chart 20/20 bilat. with corrective lenses. Fundoscopic exam normal. Color vision, visual fields, visual extinction normal.
CN III, IV, VI: Oculomotor. Trochlear, Abducens: PERRL, vert. and horiz. Saccades normal, vertical and Horiz. VOR normal, peripheral fields normal.
CN V: Trigeminal. Intact to pinprick, cotton ball; clenches teeth; corneal reflex intact. No asymmetry or tremors noted.
CN VII: Facial. Intact and symmetrical – frown, smile, eye tightening, puffing cheeks, wrinkled forehead. Taste tested with salt and sugar- intact.
CN VIII: Auditory. Abnormal Weber, Rinne, and whisper test. BC>AC bilaterally. Questionable lateralization to right on Weber. Had difficulty hearing whisper test.
CN IX & X: Glossopharyngeal and Vagus: Gag reflex intact. Normal swallowing and normal voice. Taste tested with vinegar and lemon juice – intact.
CN XI: Spinal Accessory: Shoulder shrug strong and symmetrical. Turns head from side to side against resistance but with significant pain and decreased ROM.
CN X: Hypoglossal: Tongue protrusion forward, up and down, and to the sides – intact and symmetrical. Lingual speech sounds normal. Tongue strength to cheek normal.

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Motor & Sensory exam:

Left Upper Extremity		Right Upper Extremity	
Motor Strength:		*Motor Strength:*	
Shoulder flexion	5/5	Shoulder flexion	5/5
Shoulder extension	5/5	Shoulder extension	5/5
Elbow flexion	5/5	Elbow flexion	5/5
Elbow extension	5/5	Elbow extension	5/5
Wrist flexion	5/5	Wrist flexion	5/5
Wrist extension	5/5	Wrist extension	5/5
Finger abduction	5/5	Finger abduction	5/5
Thumb extension	5/5	Thumb extension	5/5
Hand grip	5/5	Hand grip	5/5
Tone	Normal	Tone	Normal
Posture	Normal	Posture	Normal
Reflexes:		*Reflexes:*	
Biceps	2+	Biceps	2+
Brachioradialis	2+	Brachioradialis	2+
Triceps	2+	Triceps	2+
Sensation:		*Sensation:*	
Pin prick sensation	Intact	Pin prick sensation	Intact
Cotton ball sensation	Intact	Cotton ball sensation	Intact
Left Lower Extremity		**Right Lower Extremity**	
Motor Strength:		*Motor Strength:*	
Hip flexion	5/5	Hip flexion	5/5
Hip extension	5/5	Hip extension	5/5
Knee flexion	5/5	Knee flexion	5/5
Knee extension	5/5	Knee extension	5/5
Dorsiflexion	5/5	Dorsiflexion	5/5
Plantar flexion	5/5	Plantar flexion	5/5
Tone	Normal	Tone	Normal
Posture	Normal	Posture	Normal
Reflexes:		*Reflexes:*	
Patellar	2+	Patellar	3+
Achilles	2+	Achilles	2+
Clonus	Neg	Clonus	Neg
Sensation:		*Sensation:*	
Pin prick sensation	Intact	Pin prick sensation	Intact
Cotton ball sensation	Intact	Cotton ball sensation	Intact

Coordination and Gait: Cerebellum

Rapid finger-to-nose	Intact	
Rapid thumb-to-forefinger	Intact	
Romberg	Neg	
Pronator drift	Neg	
Heel-to-shin	Intact	
Heel walk	Normal	
Toe walk	Normal	
Tandem gait	Normal	
Single leg stance	Left- 20 sec	Right - 20 sec
Tandem stance	Left – 20secs	Right – 20 secs

Assessment:

Diagnoses:

- Z13.850- Encounter for screening for traumatic brain injury
- S06.0X0A – Concussion with LOC status unknown, initial encounter
- F06.71 – Mild neurocognitive disorder d/t known physiologic conditions with behavioral disturbance.
- G47.8 – Other sleep disorder
- G44.329 – Chronic post-traumatic headache, not intractable
- F43.10 – Post-traumatic stress disorder, unspecified
- M54.2 – Cervicalgia
- M50.20 – Other cervical disc displacement, unspecified region
- M54.50 – Low back pain, unspecified
- M51.36 – Other intervertebral disc degeneration, lumbar region
- M51.16 – Intervertebral disc disorders with radiculopathic symptoms, lumbar region
- M54.6 – Pain in thoracic spine
- M51.35 – Other intervertebral disc degeneration in the thoracolumbar region
- H53.58 – Visual dysfunction following TBI
- H93.25 – Auditory Processing Disorder
- R07.82 – Intercostal pain

Discussion:

Jack has been suffering with significant symptoms since the MVA on 6/10/2024 which are affecting his life. He denied any hearing loss, but testing indicated a possible auditory processing disorder that requires further investigation. Jack is experiencing severe pain in his thoracic spine, with swelling noticeable along the rim of the scapular abutting the thoracic spine on the right side. He is also experiencing significant cervical and lumbar spine pain. Jack did have pre-existing hip and sacral pain which started about 4 years ago, and he had been seeing a chiropractor for 5-6 visits just prior to the MVC. He reports his symptoms had decreased considerably but they have increased considerably since the accident. Cognitively, Jack struggles with concentration, memory, word findings, and processing verbal > written communications. He does have pre-existing ADHD but that was controlled with Adderall and has worsened since the accident. While he denies noticeable hearing loss, his wife reports he has to repeat himself multiple times before he seems to hear and process what he is saying.

Jack is aware that he is more emotionally labile and has a “shorter fuse” and he becomes more easily frustrated. While the headaches were constant for the first week after the accident, they have improved but he develops a headache after a day of working, helping at home, and studying. This is new and was not an issue before the head trauma. Jack has a number of issues that need to be addressed, but first and foremost, he should be evaluated for the visual disturbances and treated for his chronic pain.

Recommendations:

Initial treatment:

- Pain, c-spine, l-spine, thoracolumbar, left ribs: Jack has persistent, unremitting pain along his spine with radiculopathic symptoms in BLE, and sharp pain in the left intercostal region. He has been experiencing intermittent headaches since the accident, occurring several times a week. He should see a pain management specialist to manage his chronic pain which will improve his ability to perform at work and at home, and potentially improve his mild cognitive dysfunction.
- Visual disturbance: The RightEye exam revealed significant issues with eye tracking, and Jack has difficulty focusing since the accident. I recommend he see neuro-optometry for further evaluation and treatment.

Other treatment:

- Difficulty focusing and decreased memory: Jack struggles to focus at work and home. He forgets conversations and has some word finding difficulties. He should receive cognitive therapy.
- Both the Rinne and Weber tests indicated a conductive hearing loss in the right ear. There was no evidence of an obstruction or infection at the time of the visit or during a primary care office visit four days later. Further testing would be warranted to further diagnose and, if appropriate, treat the hearing loss.
- Mental health therapy may be recommended after their evaluation. Treatment should be provided according to their recommendations.

After Jack has been treated by pain management, cognitive therapy and mental health for at least 6 months, he should be re-evaluated to determine whether the cognitive dysfunction, sleep disturbances, and other symptoms have resolved. If not, additional evaluations and appropriate treatment will be considered at that time.

This report is for forensic purposes only and no physician/patient relationship has been established. Therefore, these recommendations are for the purpose of advising and educating the patient’s attorney only.

Addendum to Synaptyx Health evaluation of 7/7/24

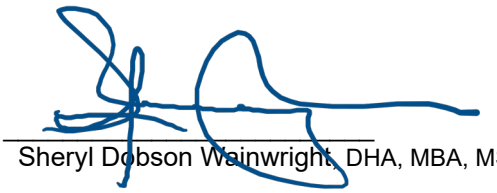
The following information was obtained from a video evaluation of Jack Hauser on 7/10/24:
I reviewed the information included in the evaluation of 7/7/24. Jack has been receiving medical treatment for his musculoskeletal pain at Pain Pro. He has also been receiving physical therapy at Advantage Physical Therapy. He recently had a cervical epidural steroid injection and is scheduled to receive another. These interventions have been helpful for his pain. Although still present, his pain has lessened.
He still has a headache about once a week that may be as severe as a 7/10. The headaches are typically exacerbated by bright lights and focusing. Shortly before the accident, Jack was running about 10-20 miles/week over 5 days, as well as lifting weights. Now he typically runs only one day a week and exercises at most for 15 minutes at a time.

His vision difficulties have not improved and have worsened recently. He has black spots in his vision. The visual symptoms are aggravated by light.
Jack still has delays in his cognitive abilities. He continues to struggle to attend, more so than prior to the accident. He still has increased irritability. These symptoms have improved slightly.
He continues to work, go to school and help care for his two young children. He has family help.

Recommendations:

1. Continue pain management through physical therapy. These interventions have been beneficial.
2. Obtain a neuro-optometry evaluation for visual symptoms that are not improving.
3. Since Jack is experiencing a change in his headaches, he should see a neurologist for a headache evaluation and recommendations for future care.
4. Given the results of the Weber, Rinne, and whisper tests, Wesley may have an auditory processing disorder which requires further investigation. Recommend referral to Nancy Murray, AuD., CCC-A/SLP, for testing and definitive diagnosis.
5. Recommend a complete neuropsychological evaluation and testing to determine whether his symptoms are related to his past medical issues or the accident on 6/10/24.
6. Consider cognitive therapy or counseling in the future. I would not do this currently as Jack's schedule is already extremely full. It is better to add interventions in a stepwise fashion.

Signed:



Sheryl Dobson Wainwright, DHA, MBA, MSN-FNP, APRN, FNP-BC, IHC, CCM, LNCC, CLCP, MSCC

Client: [TI] Jack Doe
DOB: 06/31/1987
Provider: Christy Fiscer
Provider License: ACMHC #Pending

Trauma Treatment & Counseling, LLC

Diagnosis: F06.71 - Mild neurocognitive disorder due to known physiological condition with behavioral disturbance

F43.11 - Post-traumatic stress disorder, acute

TTC Biopsychosocial

PRESENTING CONCERN/ENGAGEMENT:

Client / family's immediate needs and reasons for seeking services. Onset & precipitating factors, course, including frequencies & duration. ENGAGEMENT: Provider actions to address immediate needs & client's response.

"My injury happened on June 6, 2024. I was stopped at a red light and saw a truck in my rear-view mirror that was not going to stop in time. I don't think I lost consciousness when I was hit, but I was very dazed, and the details of the accident are not clear. I had an MRI and other tests to check for injuries, including an MRI which they said looked okay. My neck, body and head hurt. Since the accident I have been light and sound sensitivity, which limits me since I work on a computer most of the time. I have also noticed increased anxiety and depression. I've had some in the past, but this is much worse. It has all felt pretty severe and feels like my life has changed. The anxiety and depression seem to spike in the morning, which is when I hurt the most. I just haven't felt like myself, and definitely don't feel like a normal 27-year-old anymore."

LIFE GOALS:

Client or family's desires, hopes, aspirations and wishes that provide motivation to continue striving in life and to participate in treatment.

"I just want to feel functional again, so that each day doesn't feel like I'm having to climb a mountain. I haven't felt like myself since the accident. I want to be able to do my job, continue my education and be a better father to my children. Right now I don't feel like I can do any of that."

STRENGTHS & SUPPORTS:

Abilities, talents, interests, motivations, accomplishments, and circumstances that will aid in recovery. Involvement and resources of family, friends, church and social networks.

"I have family and friends who have been there for me. My wife is very supportive and tries to pick up the slack when I'm having a bad day. I like to be outside, especially kayaking or running up in the mountains, but those activities have become limited because I get tired, especially if it's bright outside.

DEVELOPMENTAL:

Prenatal, language, physical, social, and emotional development.

"As far as I know, my mom's pregnancy and delivery with me were pretty normal. I think I met the usual developmental milestones as far as I've been told. I was good at school academically and was somewhat outgoing, probably about average."

TRAUMA:

Physical, sexual, and emotional abuse; domestic violence and other trauma. Impact of trauma.

Prior to the accident: "I've had some trauma from a prior divorce, but it hasn't been ongoing and I don't really feel traumatized." Client did not want to go into further detail.

Since the accident: "I saw the truck coming so fast and was extremely worried about my son in the front seat with me. I avoid most social situations now, which has been impacting my life significantly. I have had some nightmares and flashbacks, as well as the feeling like I can't breathe at times. I sometimes worry that I will not be able to get back to any sense of normal.

Clinician note: The client appears to be impacted significantly since his accident, affecting his ability to connect with others without fear of a panic attack. His nightmares and flashbacks indicate the presence of Post-Traumatic Stress Disorder.

IMMEDIATE NEEDS/RISKS:

Risks of harm to self or others; such as suicidality, current intoxication, withdrawal risks. History of serious incidents or situations reflecting on current risk. (FIT 3) (ASAM 1).

Client denies any current risk of harm to self or others. Client denies any history of suicidal thoughts, self-harm, or risk of harm to others. Clinician does not have reason to suspect there is any risk of harm to self or others at this time.

BIOMEDICAL & WELLNESS:

History & current acute & chronic illness & medical procedures. Good health practices. Impact on psychiatric symptoms. (FIT 1) (ASAM 2).

Prior to accident - One elbow surgery in 2016.

Since the accident: "I feel like there is always some pain, discomfort, or frustrating thing happening in my head and body. There is usually pain of some kind, whether in my neck, back or head which sometimes makes it hard to sleep or focus on studying or my job. I mix up my words when I get tired and forget things I didn't use to forget prior to the accident unless I leave myself reminders). It's pretty discouraging, which doesn't' help any depression and anxiety. I am also fairly sensitive to light either indoors or outdoors.

- Fatigue
- Significant forgetfulness
- Headaches
- Ringing in ears
- Pain in neck, back and headaches

BEHAVIORAL HEALTH:

BEHAVIORAL-EMOTIONAL-COGNITIVE HEALTH: Prior and current mental illness symptoms/behavioral problems, including legal involvement; Onset, course, treatments and response. (FIT 2) (ASAM 3).

Prior to accident: "I was in therapy for a little while during a bad divorce. No other prior mental health issues."

Since the accident: "Since the accident I've noticed that everyday activities are not as fun. I get sad or anxious out of nowhere. I get headaches, I use the wrong words or get forgetful, or the ringing in my ears gets annoying. It makes me struggle with things I want to do anymore. This has impacted the quality of my life, especially since I'm only 27 years old."

MOTIVATION FOR CHANGE:

Client's statement of motivation and readiness for change. Clinician's assessment of Stage of Change. Impact motivation will have on participation in treatment. (ASAM 4).

Stage of change: Pre-contemplation, Contemplation, Preparation, Action, Maintenance, (Relapse).

"I just want to feel better. I want to feel like my normal self again." Client appears to be in the preparation stage of change.

SUBSTANCE USE/MEDICATION/OTHER

"I don't do any drugs and do not use alcohol."

Ibuprofen when needed.

CULTURE/GENDER/SOCIAL:

Values, traditions, spiritual beliefs & practices that could influence treatment & recovery; Family structure & relationships; networks, events; work or education (FIT 6) (ASAM 6).

Client denies having any specific values, traditions, or beliefs.

"My wife and I live with our 3 kids, the youngest is under 2 years old. I'm not really involved in any social or work-related networks at this time. Since the accident, I am finding myself less social. I'm just not up for it or feel fatigued. I struggle to help around the house and interact with my children because of my job and school, but I know my family depends on me."

Clinician note: Client reports a significant change in his ability to interact with his wife and children due to the pain, headaches and fatigue.

FUNCTIONAL:

Skills and abilities for accessing resources and meeting needs in daily functional areas, such as housing, employment, education and leisure.

The pain from my back and neck has made it difficult to work. The light and sound sensitivity, headaches, and cognitive issues have made it difficult to perform my work tasks and study for school. The anxiety and depression have also made it difficult to find motivation to do my normal activities, as well as engage socially. I find myself not wanting to go out, and I get fatigued quite easily.

- Mobility: "I feel unable to do the things I used to do because of pain."
- Speech: Disorganized speech patterns which make the client feel frustrated.
- Employment: I worry that my job may be at risk because of my fatigue and memory issues.

Clinician note: Client appears to be significantly impacted, primarily because of his responsibilities as the breadwinner. If he is unable to work or his job is affected, he will not be able to provide for his family. This is likely to create a negative feedback loop of isolation and depression.

FORMULATION:

Brief summary of reason for seeking treatment now; how diagnostic symptoms are interfering with goals; anticipated outcome of treatment or no treatment.

Client is a 27 year old male who may be suffering from a possible traumatic brain injury following a motor vehicle accident on June 10, 2024. He reports the following to support a diagnosis of Neurocognitive Disorder with Behavioral Disturbance: Ongoing memory and concentration issues; Depression and anxiety affecting his ability to function normally in both social and employment realms; Feeling like his overall quality of life has changed significantly. Jack also meets the criteria of Post-Traumatic Stress Disorder, Acute which is directly related to the accident. Client reports an avoidance of going out, difficulty while in a vehicle and avoiding the area of the accident. With treatment, client may begin to process the trauma of the accident, learn and implement coping skills for the anxiety and depression felt due to his functional changes, and learn how to make adjustments to his life so that he can re-engage with his family better. Without treatment, client is likely to struggle significantly with increased depression and anxiety, as well as hopelessness and despair. It is recommended that the client engage in trauma processing therapy when coping skills have been established and utilized.

RECOMMENDATIONS:

Services, Level of Care and/or referrals recommended by clinician. Client response to recommendations.

- Individual
  Therapy Weekly
- EMDR
- EMDR
  EMDR / Brainspotting

Client: [TI] Jack Doe

DOB: 06/10/2024

PLANNED SERVICES:

Agreed Services; who will provide and frequency. (Example: individual Therapy by LMHT 2x/month) Duration determined by Target Date.

Weekly individual therapy and/or family therapy as needed by Carlos Gomez, LCSW for the duration of funding or until elimination of symptoms.

It is recommended that the client seek weekly mental health therapy for the anxiety and depression that he has experienced since his accident and injury. No planned services at this time.

This assessment is being digitally signed and inserted into the clients secured portal.

Digital Signature: Carlos Gomez, LCSW

Christine Fiscer, CMHC

Date Signed

07/02/2024

Provider

Christine Fiscer

Signed by Christine Fiscer
CMHC
July 2, 2024 at 12:23 pm
IP address: 69.128.194.127

Supervisor

Carlos Gomez

Signed by Carlos Gomez
Owner, MSW, LCSW, CPT, BSP, EMDR
July 2, 2024 at 1:33 pm
IP address: 69.128.194.127

RightEye Brain Health EyeQ™

NAME:	AGE:	DOB:	DATE:	TIME:

My EyeQ: 51

DYSFUNCTIONAL — FUNCTIONAL — EXCEPTIONAL

0 10 20 30 40 50 60 70 80 90 100

Analysis

- Eyes are not working optimally when having to track an object.
- The brain areas that may be affected are the cerebellum and/or partiel lobe.

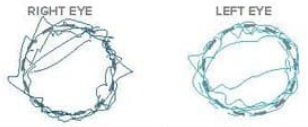
Risks

- Impaired tracking abilities.
- Sensory disturbances.
- Misjudging speed of moving objects.
- Left and right field of view differences.

EyeQ Trainer Assigned ✓

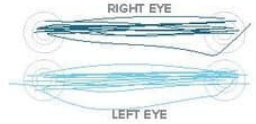
Pursuits		Saccades		Fixations	
My Score: **42**	Percentile: **37**	My Score: **58**	Percentile: **72**	My Score: **71**	Percentile: **73**

Circular Tracking



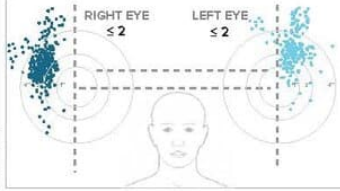
Right Eye	Left Eye
SP %: **85.48**	SP %: **73.51**
Efficiency: **16.12**	Efficiency: **14.07**

Horizontal Speed & Targeting

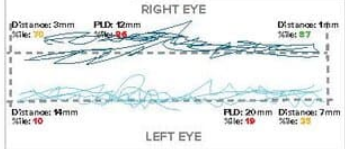


Right Eye	Left Eye
TA (mm): **10.32**	TA (mm): **11.09**
Speed (d/s): **48.01**	Speed (d/s): **48.11**

Stability

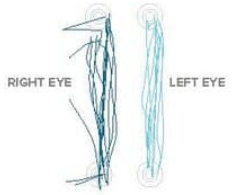


Horizontal Tracking

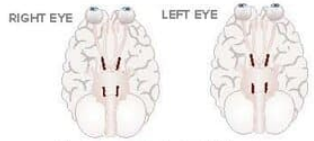


Right Eye	Left Eye
SP %: **86.40**	SP %: **85.52**
Efficiency: **89.10**	Efficiency: **89.69**

Vertical Speed & Targeting



Nerves (Translational View)

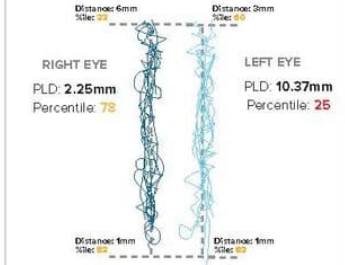


Nerves in **red** indicate dysfunction

Analysis
- Looking down right eye moves outward.
- A-pattern extropia, imbalanced muscles.

Risks
- Headache, dizziness, sleep problems, light & sound sensitivity.
- Falling, fatigue, impared focus.

Vertical Tracking



Reaction Time

Age: **18 – 27**

100ms (SL) | 125ms (VS) | 200ms (PS) = Reaction Time: **425ms**

My Score:

80ms | 145ms (VS) | 300ms (PS) = Reaction Time: **525ms**

SL = Saccadic Latency
VS = Visual Speed
PS = Processing Speed

Muscles (Translational View)

Muscles in **red** indicate dysfunction

Analysis
- Working optimally.
- No imbalance.
- Return for reassessment.

Risks
- None.

The CNS Vital Signs Neurocognitive Testing Report

*...is auto-scored from computerized versions of **VENERABLE NEUROPSYCHOLOGICAL TESTS**. The results measures the **MILLISECOND PRECISE SPEED** and **ACCURACY** of a patient's response. **TOTAL TESTING TIME** depends on the number of tests and rating instruments selected.*

CNS Vital Signs Report	**Test Date: March 28, 2015 11:20:03**
Patient ID: PatientExample	Administrator: Technician
Age: 50	Language: English (United States)
Total Test Time: 34:07 (min:secs)	CNSVS Duration: 26:16 (min:secs) / Version 4.0.86

Patient Profile:

Domain Scores	Subject Score	Standard Score	Percentile	VI**	Above	Average	Low Average	Low	Very Low
		Percentile Ra...			> 74	25 - 74	9 - 24	2 - 8	< 2
		Standard Sco...			> 109	90 - 109	80 - 89	70 - 79	< 70
Neurocognition Index (NCI)	NA	78	7	Yes				X	
Composite Memory	94	93	32	Yes		X			
Verbal Memory	52	99	47	Yes		X			
Visual Memory	42	90	25	Yes		X			
Psychomotor Speed	127	69	2	Yes					X
Reaction Time*	751	87	19	Yes			X		
Complex Attention*	16	70	2	Yes		X		X	
Cognitive Flexibility	22	70	2	Yes				X	
Processing Speed	29	64	1	Yes					X
Executive Function	28	77	6	Yes				X	
Simple Visual Attention	40	107	68	Yes		X			
Motor Speed	98	84	14	Yes			X		

Domain Dashboard: Above average domain scores indicate a standard score (SS) greater than 109 or a Percentile Rank (PR) greater than 74, indicating a high functioning test subject. Average is a SS 90-109 or PR 25-74, indicating normal function. Low Average is a SS 80-89 or PR 9-24 indicating a slight deficit or impairment. Below Average is a SS 70-79 or PR 2-8, indicating a moderate level of deficit or impairment. Very Low is a SS less than 70 or a PR less than 2, indicating a deficit and impairment. Reaction times are in milliseconds. An * denotes that "lower is better", otherwise higher scores are better. Subject Scores are raw scores calculations generated from data values of the individual subtests.
VI - Validity Indicator:** Denotes a guideline for representing the possibility of an invalid test or domain score. "No" means a clinician should evaluate whether or not the test subject understood the test, put forth their best effort, or has a clinical condition requiring further evaluation..

Verbal Memory Test (VBM)	**Score**	**Standard**	**Percentile**	
Correct Hits - Immediate	13	104	61	The **VBM** test measures how well a subject can recognize, remember, and retrieve words e.g. exploit or attend literal representations or attribute. Subjects have to remember 15 words and recognize them in a field of 15 distractors. There are two parts to this test, Immediate and Delayed. The delayed part is presented at the end of the battery. "Correct Hits" refers to the number of target words recognized. Low scores indicate verbal memory impairment.
Correct Passes - Immediate	14	96	40	
Correct Hits - Delay	9	93	32	
Correct Passes - Delay	15	110	75	

Visual Memory Test (VIM)	**Score**	**Standard**	**Percentile**	
Correct Hits - Immediate	12	101	53	The **VIM** test measures how well a subject can recognize, remember, and retrieve geometric figures e.g. exploit or attend symbolic or spatial representations. Subjects have to remember 15 geometric figures, and recognize them in a field of 15 distractors. There are two parts to this test, Immediate and Delayed. The delayed part is presented at the end of the battery. "Correct Hits" refers to the number of target figures recognized. Low scores indicate visual memory impairment.
Correct Passes - Immediate	11	98	45	
Correct Hits - Delay	9	86	18	
Correct Passes - Delay	10	95	37	

Finger Tapping Test (FTT)	**Score**	**Standard**	**Percentile**	
Right Taps Average	50	86	18	The **FTT** is test of motor speed and fine motor control ability. There are three rounds of tapping with each hand. The FTT test measures the speed and the number of finger-taps with each hand. Low scores indicate motor slowing. Speed of manual motor activity varies with handedness. Most people are faster with their preferred hand but not always.
Left Taps Average	48	85	16	

Symbol Digit Coding (SDC)	**Score**	**Standard**	**Percentile**	
Correct Responses	29	64	1	The **SDC** test measures speed of processing and draws upon several cognitive processes simultaneously, such as visual scanning, visual perception, visual memory, and motor functions. Errors may be due to impulsive responding, misperception, or confusion.
Errors*	0	110	75	

Stroop Test (ST)	**Score**	**Standard**	**Percentile**	
Simple Reaction Time*	231	102	55	The **ST** measures reaction times, inhibition / disinhibition, mental flexibility or directed attention. The ST is a classic test of impulsivity and inhibitor control. Prolonged reaction times indicate cognitive slowing / impairment. Errors may be due to impulsive responding, misperception, or confusion.
Complex Reaction Time Correct*	542	91	27	
Stroop Reaction Time Correct*	568	87	19	
Stroop Commission Errors*	6	33	1	

Shifting Attention Test (SAT)	**Score**	**Standard**	**Percentile**	
Correct Responses	38	77	6	The **SAT** measures executive function or how well a subject reacts to set shifting (mental flexibility) and manages multiple tasks simultaneously. Subjects have to adjust their responses to randomly changing rules. The best scores are high correct responses, few errors and a short reaction time. Normal subjects may be slow but accurate, or fast but not so accurate. Attention deficit may be apparent.
Errors*	10	84	14	
Correct Reaction Time*	1360	77	6	

Continuous Performance Test (CPT)	**Score**	**Standard**	**Percentile**	
Correct Responses	40	103	58	The **CPT** measures sustained attention or vigilance and choice reaction time. Most normal subjects obtain near-perfect scores on this test. A long response time may suggest cognitive slowing and/or impairment. More than 2 errors (total) may be clinically significant. More than 4 errors (total) indicate attentional dysfunction.
Omission Errors*	0	103	58	
Commission Errors*	0	107	68	
Choice Reaction Time Correct*	491	83	13	

CNS Vital Signs neurocognitive testing is a non-invasive, reimbursable clinical procedure to efficiently and objectively assess a broad-spectrum of brain function domain performances under challenge. Testing enables the measuring of important clinical symptoms, behaviors, and comorbidities salient to the evaluation and ongoing management of many neurological, psychiatric and other conditions. The colorful auto-scored reports are designed to present and share with patients and families. Computerized testing and serial evaluation of neurocognition provide a basis for patient and family feedback and can help patients and caregivers navigate problems related to daily living, school or vocational work environment.

The CNS VS reports are logical and intuitive making the interpretation by a qualified health professional relatively straightforward. CNS Vital Signs measures the severity of impairment based on a large lifespan age-matched normative comparison from ages **8 to 89**. Other clinical views such as testing validity, brain domain pattern and a longitudinal view are all auto-scored in seconds following testing. Standardized evaluation of neurocognitive and behavioural issues provides a systematic and efficient method of collecting valid and reliable clinical measures currently recommended by most neuro-psych guidelines.. The results are presented in a **DOMAIN DASHBOARD** and **DETAILED TEST** report format immediately following the brief testing session.

1 **Evaluate Validity: The Validity Indicator (VI) helps identify the possibility of an invalid test.** Embedded measures helps evaluate whether the patient is manipulating testing performance for a secondary gain or they simply did not read the test instructions. Examples of secondary gain include: drug or disability seeking, academic accommodation, malingering, symptom feigning, etc.

2 **Evaluate Severity: The scores help identify cognitive deficits and their level of impairment.** Assess even slight cognitive impairment (millisecond precision) providing immediate clinical insight into a patient's cognitive deficits and level of impairment. This gives patients, family members and caregivers knowledge of cognitive domains that underpin the ability to conduct activities of daily living.

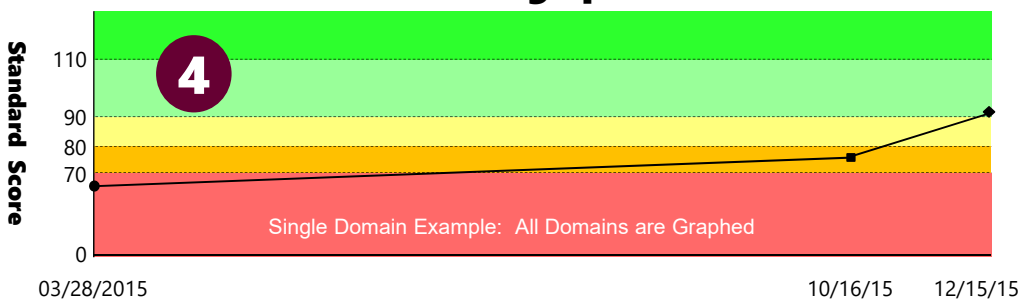
3 **Evaluate Pattern: Impairment pattern helps identify pathologies and possible comorbidities.** The CNS VS cognitive pattern profiles (interpretation guide) may assist clinicians in the evaluation of neurological, psychiatric, and developmental disorders. CNS Vital Signs cognitive testing procedure provides valid and reliable clinical endpoints to help in the evaluation and management of patients.

4 **Evaluate Longitudinally: Track disease progression, outcomes, or treatment effects.** Establish a baseline and serially assess cognitive clinical endpoints to aid in the monitoring and management of many clinical conditions and treatments e.g., measure the response to disease and treatment like MCI, MS, AD/HD & stimulants, rehabilitation efforts, and used to measure outcomes.

One Key Difference – Measuring Cognitive Speed... "CNS Vital Signs is sensitive in detecting cognitive impairment ...uses computerized forms of traditional tests such as Symbol Digit Modalities and Stroop ...are easy to use, require significantly less time to administer, produce instant scoring and can incorporate alternate forms, necessary to minimize learning effect on follow-up. ***...also the capacity to accurately-automatically quantify "speed factor" via multiple parameters such as reaction time, psychomotor speed, and processing speed, increasing their sensitivity in detecting even subtle changes in information processing speed."*** **

Easily Graph Longitudinal Results

Processing Speed



** Cognitive Impairment in Relapsing Remitting and Secondary Progressive Multiple Sclerosis Patients: Efficacy of a Computerized Cognitive Screening Battery; ISRN Neurology, 2014 Mar 13

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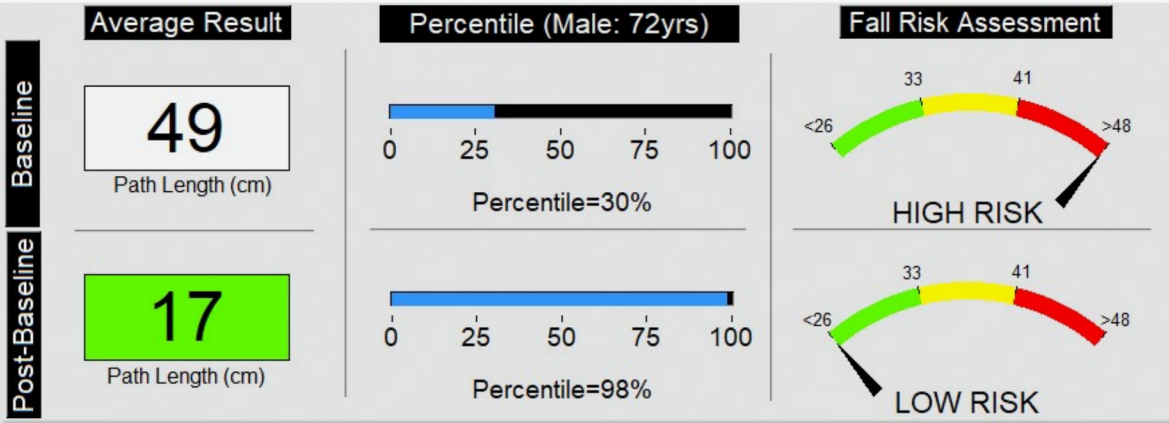
BALANCE
TRACKING SYSTEMS

Balance & Fall Risk (Main Results)

Name: Sample Profile
ID#: XXXXXX
Facility: _____

Balance and Fall Risk are determined using the BTrackS Balance Test. This test obtains a result equal to the average Center of Pressure (COP) Path Length, displayed in centimeters, from three 20-second testing trials. Percentile rankings for age and sex are derived from the BTrackS Normative Database which includes 20,000+ results from individuals aged 5-100 years. Fall Risk Assessment (FRA) is based on the number of standard deviations a result is from an average adult aged 20-39 years.



The most recent Post-Baseline result has a Center of Pressure (COP) Path Length of 17cm. Compared to the Baseline result of 49cm, this is an improvement of 65%.

The most recent Post-Baseline result corresponds to the 98th percentile, meaning this result is better than 97% of similarly aged people of the same sex. This represents an increase of 68 percentiles from the Baseline result that was in the 30th percentile.

Based on the Post-Baseline result being within one standard deviation or better of a typical adult, the Fall Risk Assessment is considered LOW RISK.

Baseline Results

DATE	T1	T2	T3	BBT	%	FRA	NOTE
2/1/2018 3:47:02 PM	48	44	56	49	30	HIGH	Initial Visit

Post-Baseline Results

DATE	T1	T2	T3	BBT	%	FRA	NOTE
2/8/2018 3:20:10 PM	39	44	44	42	44	HIGH	Wk 1 Follow-up
3/2/2018 4:24:24 PM	40	40	38	39	48	MOD	Wk 4 Follow-up
4/1/2018 2:27:11 PM	33	34	35	34	58	MOD	Wk 8 Follow-up
4/28/2018 3:37:54 PM	24	30	31	29	75	LOW	Wk 12 Follow-up
6/2/2018 3:41:18 PM	23	21	23	22	89	LOW	Wk 16 Follow-up
8/1/2018 1:44:12 PM	19	17	15	17	98	LOW	6 Month Follow-up

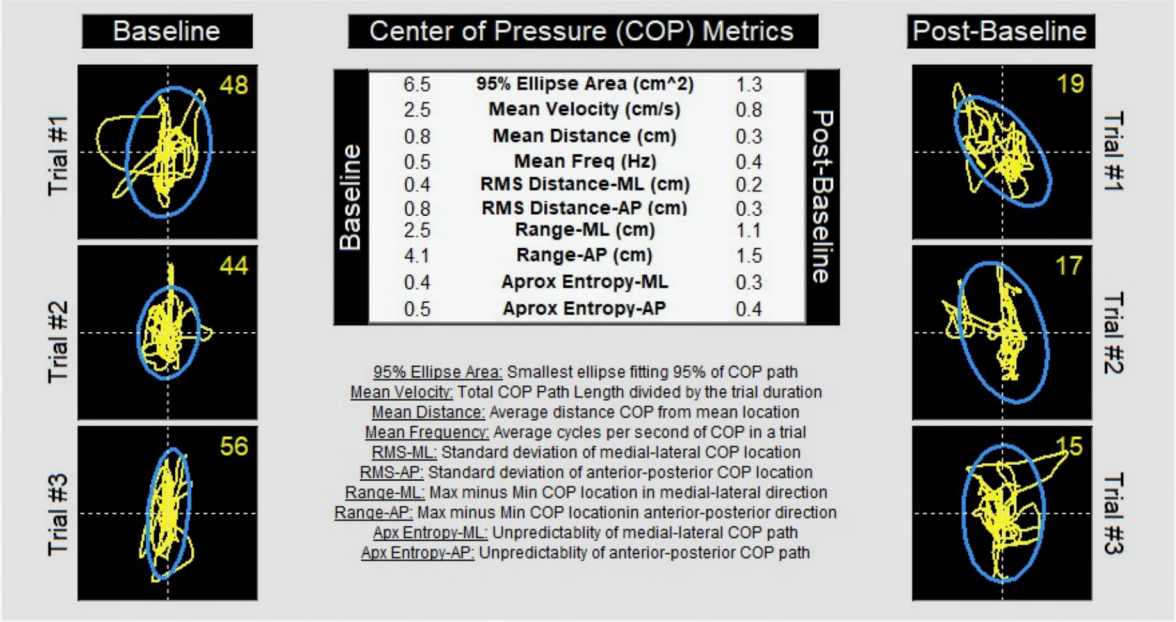
Notes:_____

BALANCE TRACKING SYSTEMS

Balance & Fall Risk (COP Details)

Name: Sample Profile
ID#: XXXXXX
Facility: _____

Visualizations of the COP Path Length and 95% Ellipse for Baseline and most recent Post-Baseline trials are shown below. The center of each image, where the dotted lines intersect, represents the average COP position. In the tables, additional COP metrics beyond path length are provided.



Baseline Results

DATE	ELL	VEL	DIS	FREQ	RM-ML	RM-AP	RG-ML	RG-AP	EN-ML	EN-AP
2/1/2018 3:47:02 PM	4.7	2.5	0.8	0.5	0.4	0.8	2.5	4.1	0.4	0.5

Post-Baseline Results

DATE	ELL	VEL	DIS	FREQ	RM-ML	RM-AP	RG-ML	RG-AP	EN-ML	EN-AP
2/8/2018 3:20:10 PM	136.1	2.1	1.2	0.3	0.6	1.3	3.1	5.5	0.4	0.2
3/2/2018 4:24:24 PM	84.2	2.0	0.9	0.3	0.5	1.0	2.7	4.3	0.4	0.3
4/1/2018 2:27:11 PM	35.9	1.7	0.7	0.4	0.3	0.7	1.4	3.2	0.5	0.4
4/28/2018 3:37:54 PM	29.2	1.4	0.5	0.4	0.3	0.6	1.7	2.7	0.4	0.4
6/2/2018 3:41:18 PM	17.4	1.1	0.4	0.4	0.2	0.5	1.0	2.2	0.5	0.4
8/1/2018 1:44:12 PM	1.0	0.8	0.3	0.4	0.2	0.3	1.1	1.5	0.3	0.4

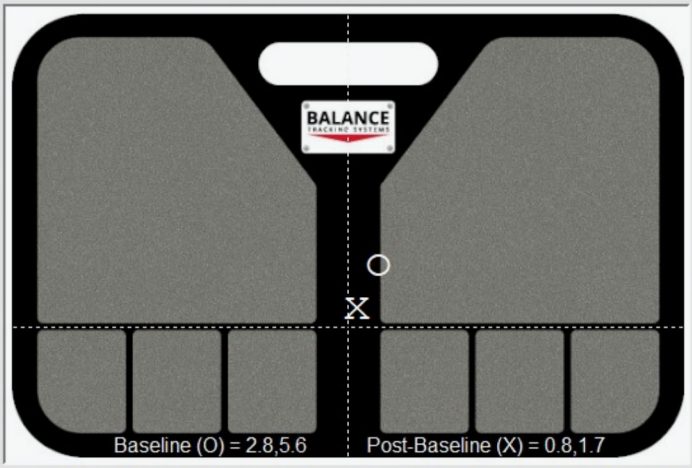
Notes:_____

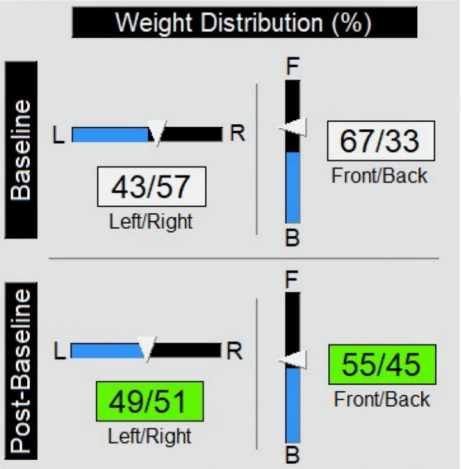
BALANCE TRACKING SYSTEMS

Weight Distribution

Name: Sample Profile
ID#: XXXXXX
Facility: _____

The Weight Distribution test measures Left/Right and Front/Back asymmetries in the natural standing posture of an individual. This is accomplished by tracking the percentage of weight distributed accross the BTracks Balance Plate, and the location of the Center of Pressure (COP) for the person being tested relative to an idealized position midway between the ankles.





The left/right weight distribution for the most recent Post-Baseline result (X) is 49/51. This result is closer than the Baseline result (O) to the ideal Left/Right distibution of 50/50. The Front/Back weight distribution for the most recent Post-Baseline is 55/45. This result is closer than the Baseline result to the ideal left/right distibution of 50/50.

Coordinates for COP locations are at the bottom of the BTrackS Balance Plate image above. Ideal coordinate values are equal to zero.

Baseline Results

DATE	L/R	F/B	COPx	COPy	NOTE
2/1/2018 3:47:02 PM	43/57	67/33	2.8	5.6	Initial Visit

Post-Baseline Results

DATE	L/R	F/B	COPx	COPy	NOTE
2/8/2018 3:20:10 PM	46/54	63/37	3.0	4.5	Wk 1 Follow-up
3/2/2018 4:24:24 PM	45/55	63/37	2.2	4.5	Wk 4 Follow-up
4/1/2018 2:27:11 PM	48/52	61/39	1.1	3.5	Wk 8 Follow-up
4/28/2018 3:37:54 PM	49/51	58/42	0.4	2.5	Wk 12 Follow-up
6/2/2018 3:41:18 PM	50/50	56/44	0.0	1.8	Wk 16 Follow-up
8/1/2018 1:44:12 PM	49/51	55/45	0.8	1.7	6 Month Follow-up

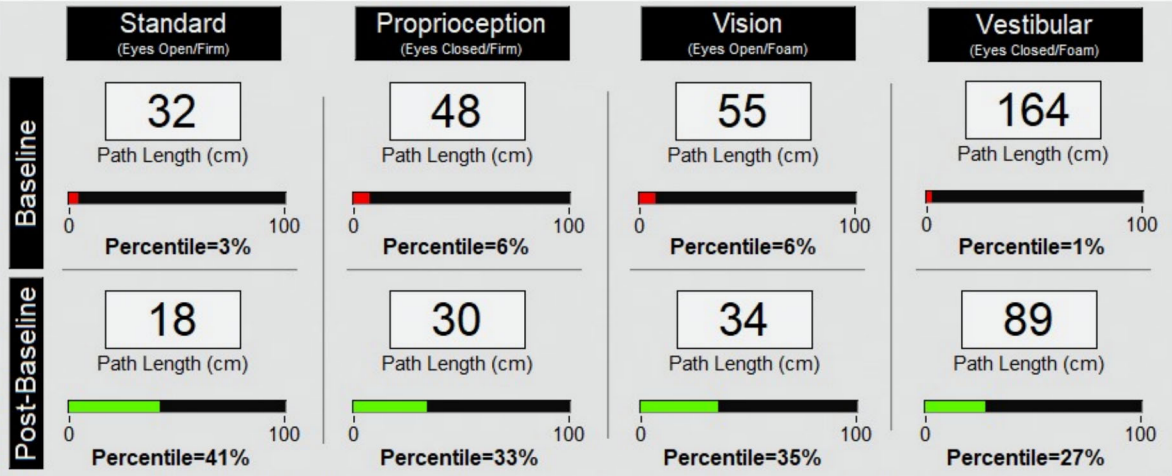
Notes:_____

BALANCE TRACKING SYSTEMS

Modified CTSIB (Main Results)

Name: Sample Profile
ID#: XXXXXX
Facility: _____

The modified Clinical Test of Sensory Integration and Balance (mCTSIB) evaluates sensory contributions to postural control based on Center of Pressure (COP) Path Length. The first trial is the "Standard" condition where balance is tested with eyes open and two feet on the BTrackS Balance Plate's firm surface. The second (i.e. eyes closed on a firm surface), third (i.e. eyes open on a "perturbed", foam surface), and fourth (i.e. eyes closed on a foam surface) trials give information on how proprioception, vision and vestibular information are respectively used for balance.



When compared to healthy adults of the same sex, the most recent Baseline mCTSIB results showed bottom quartile performance in four conditions (Standard, Proprioception, Vision, Vestibular). The most recent Post-Baseline mCTSIB test results show bottom quartile performance in zero conditions.

The composite mCTSIB results were 299cm at Baseline and 171cm at Post-Baseline. This is an improvement of 128cm.

Baseline Results

DATE	STD	%	PRO	%	VIS	%	VES	%	COMP	%	NOTE
2/1/2018 15:47 PM	32	3	48	6	55	6	164	1	299	0	Initial Visit

Post-Baseline Results

DATE	STD	%	PRO	%	VIS	%	VES	%	COMP	%	NOTE
2/8/2018 15:20 PM	29	7	44	9	51	7	158	2	282	1	Wk 1 Follow-up
3/2/2018 16:24 PM	28	8	43	9	50	8	130	7	251	5	Wk 4 Follow-up
4/1/2018 14:27 PM	26	11	38	14	44	14	120	10	228	9	Wk 8 Follow-up
4/28/2018 15:37 PM	22	22	36	17	42	17	118	10	218	11	Wk 12 Follow-up
6/2/2018 15:41 PM	20	30	35	19	40	20	105	15	200	16	Wk 16 Follow-up
8/1/2018 13:44 PM	18	41	30	33	34	35	89	27	171	29	6 Month Follow-up

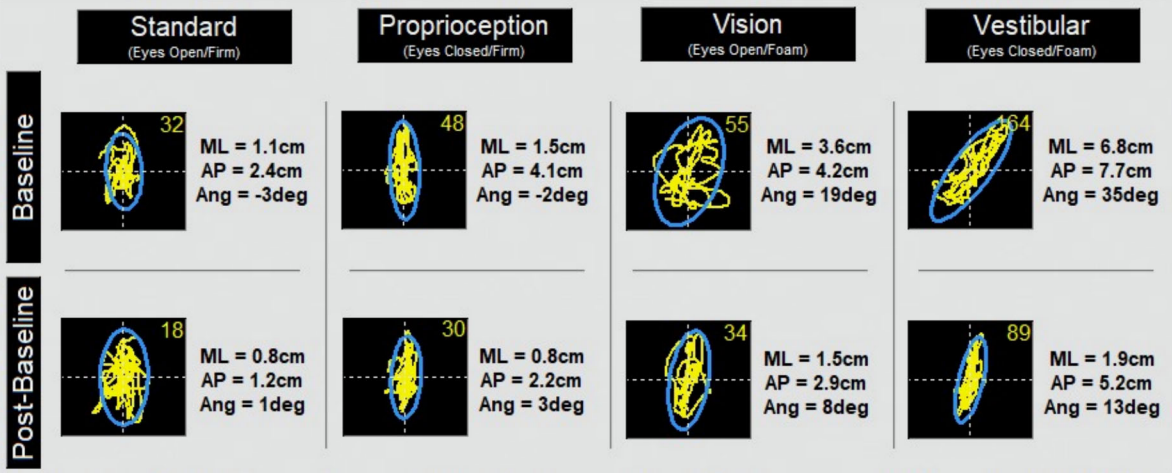
Notes:_____

BALANCE TRACKING SYSTEMS

Modified CTSIB (COP Details)

Name: Sample Profile
ID#: XXXXXX
Facility: _____

Visualizations of the COP Path Length and 95% Ellipse for Baseline and most recent Post-Baseline trials are shown below. The center of each image, where the dotted lines intersect, represents the average COP position. In the tables, additional COP metrics beyond path length are provided.



An ellipse fitting 95% of the Center of Pressure (COP) path within it, and three COP metrics, are provided for each trial. The Medial/Lateral (i.e. ML) and Anterior/Posterior (i.e. AP) results give the Left/Right and Front/Back width and height of COP path respectively. The Angle (i.e. Ang) metric provides the ellipse rotation to the Left (negative value) or Right (positive value) of vertical.

Baseline Results

DATE	STD (ML,AP,ANG)	PRO (ML,AP,ANG)	VIS (ML,AP,ANG)	VEST (ML AP,ANG)
2/1/2018 15:47 PM	1.1, 2.4, -3	1.5, 4.1, -2	3.6, 4.2, 19	6.8, 7.7, 35

Post-Baseline Results

DATE	STD (ML,AP,ANG)	PRO (ML,AP,ANG)	VIS (ML,AP,ANG)	VEST (ML,AP,ANG)
2/8/2018 15:20 PM	1.2, 2.2, 2	1.5, 3.8, 4	3.4, 4.1, 16	6.2, 7.2, 30
3/2/2018 16:24 PM	1.1, 1.9, -2	1.3, 3.6, 2	2.9, 3.6, 11	5.8, 6.8, 25
4/1/2018 14:27 PM	0.9, 1.7, 0	1.1, 3.1, -2	2.1, 3.6, 10	4.2, 6.6, 21
4/28/2018 15:37 PM	0.7, 1.6, 1	0.9, 2.7, 1	1.9, 3.3, 10	3.3, 5.8, 19
6/2/2018 15:41 PM	0.8, 1.3, 2	0.8, 2.5, 1	1.6, 3.1, 9	3.2, 5.3, 16
8/1/2018 13:44 PM	0.8, 1.2, 1	0.8, 2.2, 3	1.5, 2.9, 8	1.9, 5.2, 13

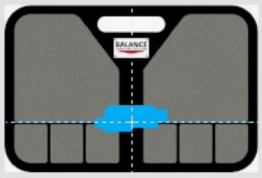
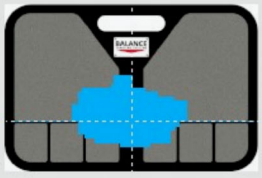
Notes:_____

BALANCE TRACKING SYSTEMS

Limits of Stability

Name: Sample Profile
ID#: XXXXXX
Facility: _____

The Limits of Stability Test measures the functional base of support of an indiviudal. Specifically, the individual being tested stands centered on the BTrackS Balance Plate and leans in all directions to determine the area within which he or she can move their Center of Pressure (COP) without falling. This metric is determined for 1) the total area covered and 2) within each quadrant of the BTrackS Balance Plate (i.e. Front Left, Back Left, Front Right, Back Right).

Visual Overview	Overall Result	Quadrant Results
Baseline 	80 Total Area (cm^2)	29 Front Left Area (cm^2); 29 Front Right Area (cm^2); 16 Back Left Area (cm^2); 6 Back Right Area (cm^2)
Post-Baseline 	318 Total Area (cm^2)	120 Front Left Area (cm^2); 84 Front Right Area (cm^2); 62 Back Left Area (cm^2); 52 Back Rightt Area (cm^2)

Compared to Baseline, the most recent Post-Baseline Limits of Stability results show increased area for five conditions (Front Left, Back Left, Back Right, Front Right, Total). There was no change, or a decrease, in the area for zero conditions.

Baseline Results

DATE	FL	BL	BR	FR	TOTAL	NOTE
2/1/2018 3:47:02 PM	29	16	6	29	80	Initial Visit

Post-Baseline Results

DATE	FL	BL	BR	FR	TOTAL	NOTE
2/8/2018 3:20:10 PM	24	45	20	22	111	Wk 1 Follow-up
3/2/2018 4:24:24 PM	55	25	27	48	155	Wk 4 Follow-up
6/2/2018 3:41:18 PM	81	35	30	84	230	Wk 16 Follow-up
8/1/2018 1:44:12 PM	120	62	52	84	318	6 Month Follow-up

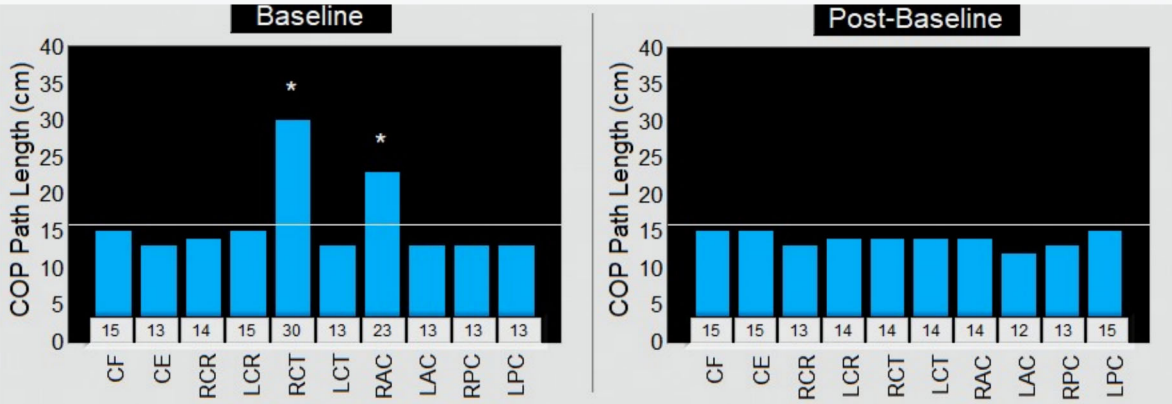
Notes:_____

BALANCE TRACKING SYSTEMS

Cervical Challenge (Main Results)

Name: Sample Profile
ID#: XXXXXX
Facility: _____

The Cervical Challenge Test is an evaluation of Center of Pressure Path Length changes that occur when the head is placed into different anatomical positions. There are ten positions tested, which are compared to a reference position where the person stands with head neutral. This test is designed for clinicians with advanced knowledge of the head, neck and spine.



The most recent Baseline results show increased Path Length (*) in two conditions (Right Cervical Tilt, Right Anterior Canal).

The most recent Post-Baseline results show increased Path Length (*) in zero conditions.

Increased Path Length is relative to the Head Neutral trial (Baseline=16cm, Post-Baseline=16cm), represented by a white horizontal line in the graphs above.

Baseline Results

DATE	NEU	CF	CE	RCR	LCR	RCT	LCT	RAC	LAC	RPC	LPC	NOTE
2/1/2018 3:47:02 PM	16	15	13	14	15	30	13	23	13	13	13	Initial Visit

Post-Baseline Results

DATE	NEU	CF	CE	RCR	LCR	RCT	LCT	RAC	LAC	RPC	LPC	NOTE
3/2/2018 4:24:24 PM	16	15	15	13	14	14	14	14	12	13	15	Post 4 week intervention

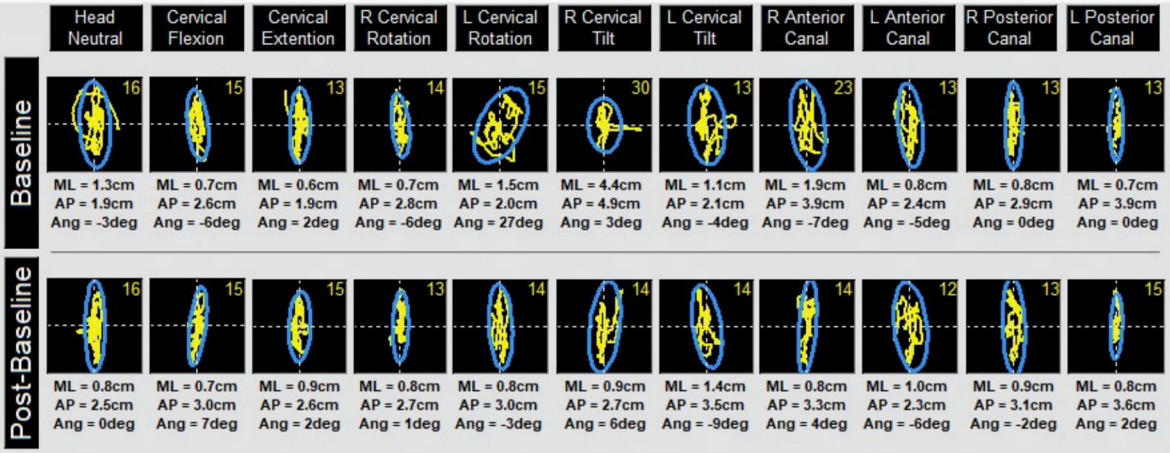
Notes:_____

BALANCE TRACKING SYSTEMS

Cervical Challenge (COP Details)

Name: Sample Profile
ID#: XXXXXX
Facility: _____

Visualizations of the COP Path Length and 95% Ellipse for Baseline and most recent Post-Baseline trials are shown below. The center of each image, where the dotted lines intersect, represents the average COP position. In the tables, additional COP metrics beyond path length are provided.



An ellipse fitting 95% of the Center of Pressure (COP) path within it, and three COP metrics, are provided for each trial. The Medial/Lateral (i.e. ML) and Anterior/Posterior (i.e. AP) results give the Left/Right and Front/Back width and height of the COP path respectively. The Angle (i.e. Ang) metric provides the ellipse rotation to the Left (negative value) or Right (positive value) of vertical.

Baseline Results

DATE	NEU (ML,AP,ANG)	CF (ML,AP,ANG)	CE (ML,AP,ANG)	RCR (ML,AP,ANG)	LCR (ML,AP,ANG)
2/1/2018 3:47:02 PM	1.3, 1.9, -3	0.7, 2.6, -6	0.6, 1.9, 2	0.7, 2.8, -6	1.5, 2.0, 27

RCT (ML,AP,ANG)	LCT (ML,AP,ANG)	RAC (ML,AP,ANG)	LAC (ML,AP,ANG)	RPC (ML,AP,ANG)	LPC (ML,AP,ANG)
4.4, 4.9, 3	1.1, 2.1, -4	1.9, 3.9, -7	0.8, 2.4, -5	0.8, 2.9, 0	0.7, 3.9, 0

Post-Baseline Results

DATE	NEU (ML,AP,ANG)	CF (ML,AP,ANG)	CE (ML,AP,ANG)	RCR (ML,AP,ANG)	LCR (ML,AP,ANG)
3/2/2018 4:24:24 PM	0.8, 2.5, 0	0.7, 3.0, 7	0.9, 2.6, 2	0.8, 2.7, 1	0.8, 3.0, -3

RCT (ML,AP,ANG)	LCT (ML,AP,ANG)	RAC (ML,AP,ANG)	LAC (ML,AP,ANG)	RPC (ML,AP,ANG)	LPC (ML,AP,ANG)
0.9, 2.7, 6	1.4, 3.5, -9	0.8, 3.3, 4	1.0, 2.3, -6	0.9, 3.1, -2	0.8, 3.6, 2

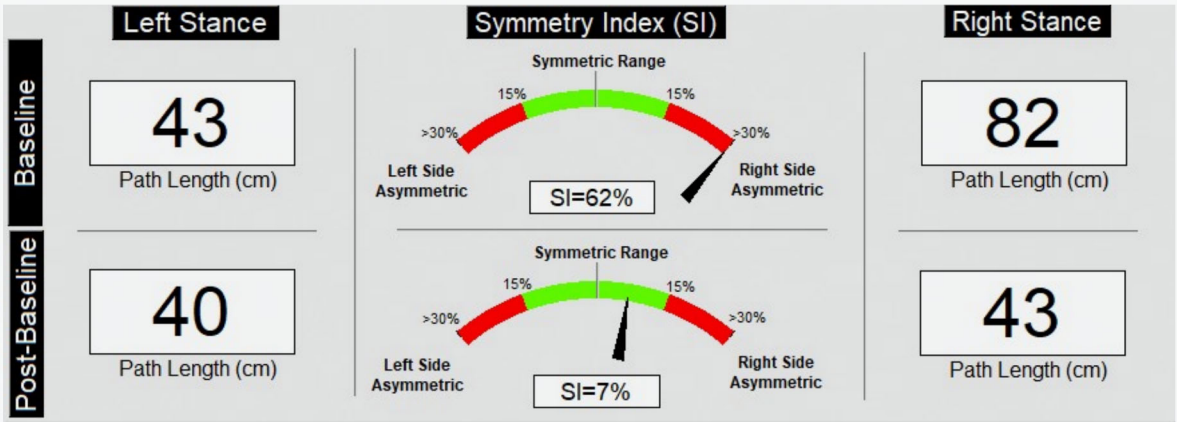
Notes:_____

BALANCE TRACKING SYSTEMS

Single Leg Stance (Main Results)

Name: Sample Profile
ID#: XXXXXX
Facility: N/A

The BTrackS Single Leg Stance Test compares the postural sway generated by an individual when they stand on their left versus right foot. The test has two practice trials – one on the left foot and one on the right. The third and fourth trials are actual trials for the left and right foot repectively. When the test is completed, the left versus-right results are compared using a "Symmetry Index". A person is considered to be within the Symmetric Range if they show less than 15% difference between the left and right stances.



The most recent Post-Baseline Path Length results for the Left (40cm) and Right (43cm) Stance trials differed by 3cm.

This difference corresponds to a Symmetry Index (SI) of 7%, which indicates a relative symmetry between Left and Right Stance trials. Specifically, the Left and Right Stances had Path Lengths within 15% of each other when compared to the average Path Length of the two stances.

Since Baseline testing, Left and Right Stance results are 55% more symmetric.

Baseline Results

DATE	LP	RP	LA	RA	Diff	SI	SYM	SIDE	NOTE
2/1/2018 3:47:02 PM	50	96	43	82	-39	62	NO	RIGHT	Initial Visit

Post-Baseline Results

DATE	LP	RP	LA	RA	Diff	SI	SYM	SIDE	NOTE
2/8/2018 3:20:10 PM	44	78	43	75	-32	54	NO	RIGHT	Wk 1 Follow-up
3/2/2018 4:24:24 PM	44	61	40	53	-13	28	NO	RIGHT	Wk 4 Follow-up
6/2/2018 3:41:18 PM	44	42	40	43	-3	7	YES		Wk 16 Follow-up

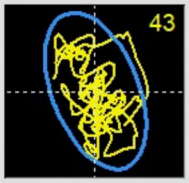
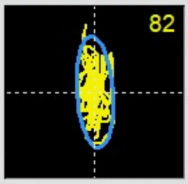
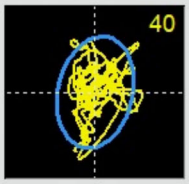
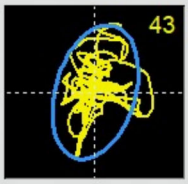
Notes:

BALANCE TRACKING SYSTEMS

Single Leg Stance (COP Details)

Name: Sample Profile
ID#: XXXXXX
Facility: N/A

Visualizations of the COP Path Length and 95% Ellipse for Baseline and most recent Post-Baseline trials are shown below. The center of each image, where the dotted lines intersect, represents the average COP position. In the tables, additional COP metrics beyond path length are provided.

	Left Stance	Additional COP Metrics		Right Stance
Baseline		Left Stance / Right Stance		
Post-Baseline		Left Stance / Right Stance		

Left Stance (Baseline)	95% Ellipse Area (cm^2)	Right Stance (Baseline)
5.9	95% Ellipse Area (cm^2)	6.6
2.1	Range-ML (cm)	1.6
2.9	Range-AP (cm)	5.6
-20	Ellipse Angle (deg)	-4
2.1	Mean Velocity (cm/s)	4.1
0.5	RMS-ML (cm)	0.3
0.7	RMS-AP (cm)	1.1

Left Stance (Post-Baseline)	95% Ellipse Area (cm^2)	Right Stance (Post-Baseline)
2.5	95% Ellipse Area (cm^2)	3.3
1.4	Range-ML (cm)	1.7
2.4	Range-AP (cm)	2.6
12	Ellipse Angle (deg)	16
2.0	Mean Velocity (cm/s)	2.1
0.3	RMS-ML (cm)	0.3
0.5	RMS-AP (cm)	0.5

An ellipse fitting 95% of the Center of Pressure (COP) path within it, and seven COP metrics, are provided for Left and Right Stance trials.

The 95% Ellipse Area is the area within the ellipse. The Range-ML and Range-AP give the width and height of the ellipse in the Left/Right and Front/Back directions respectively. The Ellipse Angle (i.e. Ang) is a measure of the ellipse rotation relative to vertical. The Mean Velocity is the average speed of COP over a trail. The RMS-ML and RMS-AP give the variability of COP in the Medial/Lateral and Anterior/Posterior directions based on the standard deviation of Left/Right and Front/Back COP.

Baseline Results

DATE	ELL(L,R)	RG-ML(L,R)	RG-AP(L,R)	ANG(L,R)	VEL(L,R)	RM-ML(L,R)	RM-AP(L,R)
2/1/2018 3:47:02 PM	5.9,6.6	2.1,1.6	2.9,5.6	-20,-4	2.1,4.1	0.5,0.3	0.7,1.1

Post-Baseline Results

DATE	ELL(L,R)	RG-ML(L,R)	RG-AP(L,R)	ANG(L,R)	VEL(L,R)	RM-ML(L,R)	RM-AP(L,R)
2/8/2018 3:20:10 PM	3.6,6.7	1.8,2.1	2.7,4.6	-13,8	2.1,3.8	0.3,0.4	0.6,1.1
3/2/2018 4:24:24 PM	3.2,4.3	1.7,2.0	2.3,2.8	3,-1	2.0,2.6	0.4,0.4	0.5,0.6
6/2/2018 3:41:18 PM	2.5,3.3	1.4,1.7	2.4,2.6	12,16	2.0,2.1	0.3,0.3	0.5,0.5

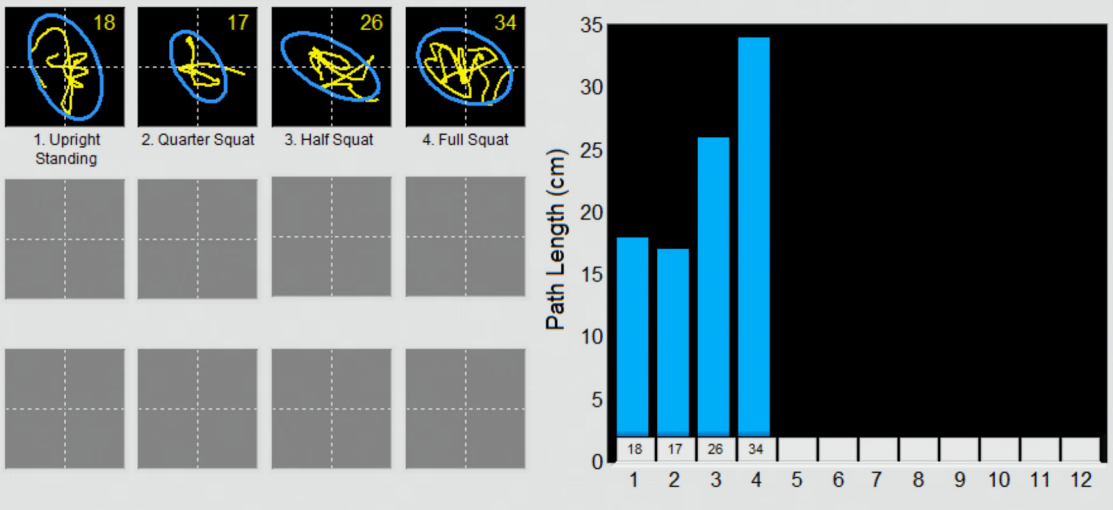
Notes:_____

BALANCE TRACKING SYSTEMS

Static Squat Depth Test (Baseline)

Name: Sample Profile
ID#: XXXXXX
Facility: _____

Below are Baseline test results from 4/28/2018 3:37:54 PM using the "Static Squat Depth Test" protocol.



Metrics Quantifying COP Magnitude

TRIAL NAME	DUR	PL	COPx	COPy	RG-ML	RG-AP	ELL	MAJ	MIN	DIS-max	DIS-avg
1. Upright Standing	5	18.0	-1.1	4.5	2.6	3.8	10.9	4.9	2.8	2.1	1.0
2. Quarter Squat	5	17.0	-3.2	6.0	4.1	3.1	11.0	5.0	2.8	3.0	1.1
3. Half Squat	5	26.0	-3.2	7.7	4.4	3.4	16.7	6.8	3.1	3.7	1.4
4. Full Squat	5	34.0	-6.3	9.0	4.8	3.4	16.2	5.5	3.8	2.6	1.2

Metrics Quantifying COP Derivatives

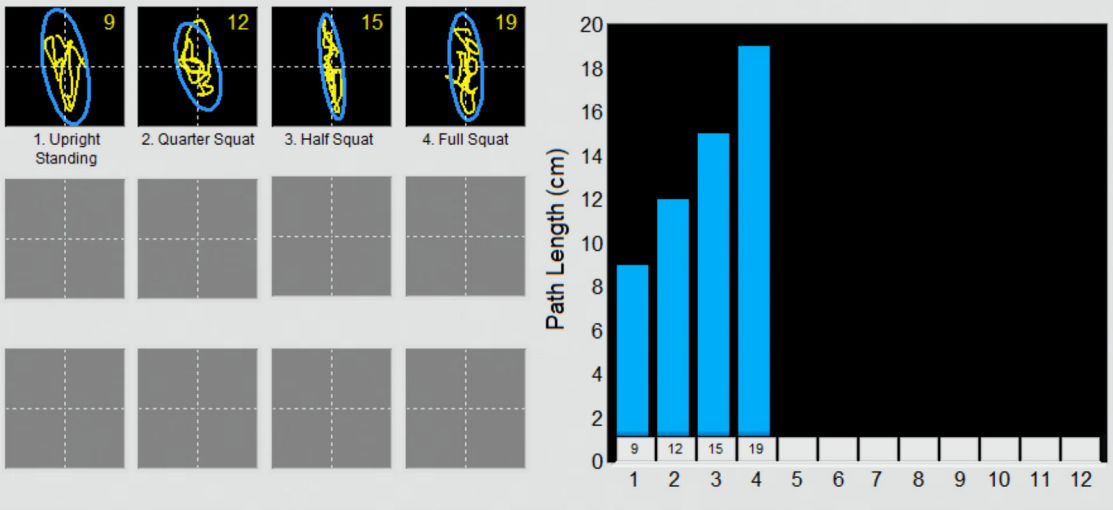
TRIAL NAME	DUR	ANG	VEL-max	VEL-avg	ACC-max	ACC-avg	FREQ	RM-ML	RM-AP	FAT	APT
1. Upright Standing	5	-23	9.2	3.6	77.5	1.3	0.1	0.7	0.9	28.3	0.0
2. Quarter Squat	5	-32	21.6	3.3	233.0	0.0	0.1	0.8	0.9	0.0	38.6
3. Half Squat	5	-61	19.8	5.1	187.6	0.3	0.1	1.3	0.9	0.0	57.6
4. Full Squat	5	-63	23.7	6.7	263.9	1.7	0.2	1.0	0.8	0.0	27.9

BALANCE TRACKING SYSTEMS

Static Squat Depth Test (Post-Baseline)

Name: Sample Profile
ID#: XXXXXX
Facility: _____

Below are Post-Baseline test results from 8/1/2018 1:44:12 PM using the "Static Squat Depth Test" protocol.



Metrics Quantifying COP Magnitude

TRIAL NAME	DUR	PL	COPx	COPy	RG-ML	RG-AP	ELL	MAJ	MIN	DIS-max	DIS-avg
1. Upright Standing	5	9.0	0.3	-0.5	0.9	1.6	1.8	2.5	0.9	1.0	0.5
2. Quarter Squat	5	12.0	0.3	1.3	1.1	2.3	2.6	2.7	1.2	1.4	0.5
3. Half Squat	5	15.0	0.9	1.5	0.7	3.5	2.6	4.1	0.8	1.8	0.7
4. Full Squat	5	19.0	0.2	1.8	1.5	4.0	5.8	4.9	1.5	2.2	0.9

Metrics Quantifying COP Derivatives

TRIAL NAME	DUR	ANG	VEL-max	VEL-avg	ACC-max	ACC-avg	FREQ	RM-ML	RM-AP	FAT	APT
1. Upright Standing	5	-10	8.0	1.6	93.5	0.1	0.1	0.2	0.5	23.1	0.0
2. Quarter Squat	5	-16	7.7	2.3	51.6	0.2	0.2	0.3	0.5	44.1	0.0
3. Half Squat	5	-7	11.7	3.0	108.7	0.1	0.2	0.2	0.8	0.0	34.0
4. Full Squat	5	-4	12.9	3.7	120.9	0.4	0.2	0.3	1.0	19.1	0.0

BALANCE TRACKING SYSTEMS

Glossary of Metrics

Name: Sample Profile
ID#: XXXXXX
Facility: _____

Visualizations on Custom Design protocol report pages show the Center of Pressure (COP) Path Length and 95% Ellipse. The center of each image, where the dotted lines intersect, represents the average COP position. Below, descriptions of each COP metric for Custom Design protocols are provided. These metrics quantify COP magnitude (i.e. size) and derivatives of COP such as direction, speed and consistency.

Metrics Quantifying COP Magnitude

METRIC (unit)	DESCRIPTION
PL- Path Length (cm)	Total COP distance travelled
COPx - Average COP left/right location (cm)	Average location of the COP relative to the midline of the plate (+ Right, - Left)
COPy - Average COP front/back location (cm)	Average location of the COP relative to the midline of the ankles (+ Front, - Back)
RG-ML - Range Medial/lateral (cm)	Difference between Maximum and Minimum COPx values
RG-AP - Range Anterior/posterior (cm)	Difference between Maximum and Minimum COPy values
ELL - Ellipse Area (cm^2)	Area within the smallest ellipse fitting 95% of COP trace
MAJ - Major Ellipse Axis (cm)	Length of the longest ellipse axis
MIN - Minor Ellipse Axis (cm)	Length of the shortest ellipse axis
DIS-max - Maximum Distance (cm)	Farthest distance COP point from the average COP location
DIS-avg - Average Distance (cm)	Average distance of any COP point from average COP location

Metrics Quantifying COP Derivatives

ANG - Ellipse Angle (deg)	Amount and direction of ellipse rotation relative to vertical. (+ Right, - Left)
VEL-max - Maximum Velocity (cm/s)	Fastest COP speed during a trail
VEL-avg - Average Velocity (cm/s)	Average COP speed during a trial
ACC-max - Maximum Acceleration (cm/s^2)	Largest COP acceleration during a trail
ACC-avg - Average Acceleration (cm/s^2)	Average COP acceleration during a trial
FREQ - Frequency (Hz)	Average number of COP cycles per second
RM-ML - RMS Medial/Lateral (cm)	Root mean squared value of left/right COP
RM-AP - RMS Anterior/Posterior (cm)	Root mean squared value of front/back COP
FAT - Fatigability (%)	In Percentage - How much more sway in second half of the trial than the first half
APT - Adaptability (%)	In Percentage – How much less sway in second half of the trial than the first half

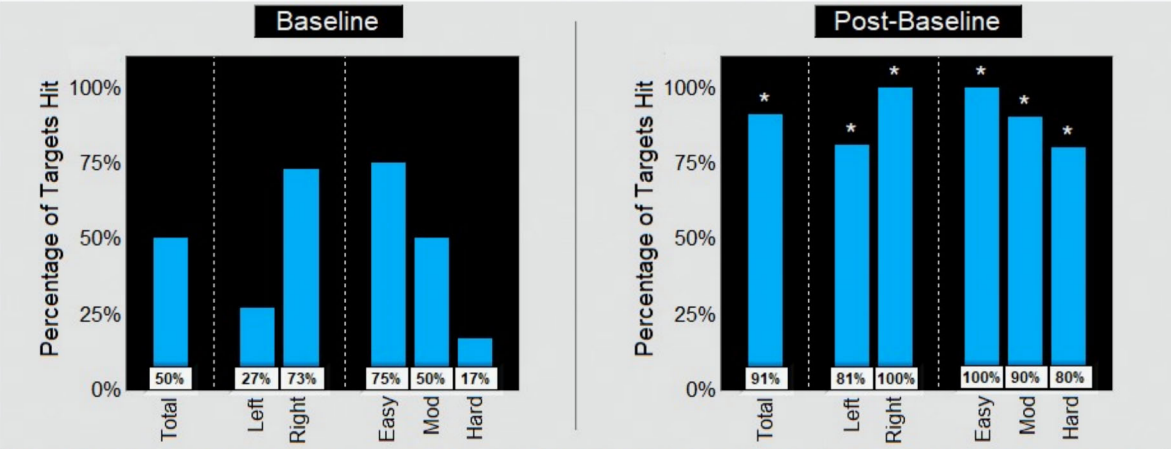
Notes:_____

BALANCE TRACKING SYSTEMS

Left/Right Targets

Name: Sample Profile
ID#: XXXXXX
Facility: _____

Left/Right Targets training is a biofeedback-based application for improving the left/right weight shifting ability of an indiviudal. Three target sizes (i.e. Easy, Moderate and Hard) are presented to the left or right of center on an image of the BTrackS Balance Plate on the screen. The individual being trainied must shift their Center of Pressure (COP) to move a yellow dot into the target zones, and hold it for three seconds. Targets disappear after 10 seconds if a "hit" does not occur. Performance is judged by the percentage of targets hit within a session.



Compared to Baseline, the most recent Post-Baseline results show an increased percentage of targets hit (*) in six conditions (Total, Left, Right, Easy, Moderate, Hard). There was no change, or a decrease, in the percentage of targets hit in zero conditions.

Baseline Results

DATE	DUR	T	L	R	E	M	H	NOTE
2/1/2018 3:47:02 PM	180	50%	27%	73%	75%	50%	17%	Lt knee injury

LE	LM	LH	RE	RM	RH
2/4=50%	1/4=25%	0/3=0%	4/4=100%	3/4=75%	1/3=33%

Post-Baseline Results

DATE	DUR	T	L	R	E	M	H	NOTE
3/2/2018 4:24:24 PM	180	91%	81%	100%	100%	90%	80%	4 wks rehabilitation

LE	LM	LH	RE	RM	RH
6/6=100%	4/5=80%	3/5=60%	6/6=100%	5/5=100%	5/5=100%

Notes:_____