**Narrative Summary**

On September 9, YYYY, at 4:13 p.m., XXXX, a 28-year female was involved in a motor vehicle collision. She was a restrained driver, traveling in a 2009 Mercedes Mariner, northbound on South 70th street at West Dickenson Street. At the same time, your insured, XXXX, was driving a YYYY Ford Escape at West Dickenson Street and South 70th Street. Mr. XXXX made an improper left turn, failing to yield way, and collided with Ms. XXXX’s vehicle. Due to the impact, she sustained injuries to her neck and left shoulder.

On the same day, Ms. XXXX was examined by XXXX, P.A.-C., at the emergency room of XXXX Hospital, for the complaints of having pain in her neck and left shoulder. She reported her pain level as 6/10. On examination, she had decreased range of motion, palpable tenderness, and pain in her left shoulder. She was diagnosed with cervicalgia and pain in her left shoulder. Diazepam 5 mg, Oxycodone, immediate release 5 mg, Flexeril 10 mg, Levonorgestrel, Naproxen 500 mg, Aldactone 50 mg, Tramadol 50 mg, and Tretonoin microsphere 0.1 gel were prescribed. She was discharged from the facility.

On the same day, an X-ray of Ms. XXXX’s chest was obtained by XXXX, M.D., and XXXX, M.D. The study revealed no acute cardiopulmonary process and no fractures or dislocation. Mild flattening of her left humeral head was noted which was likely congenital.

On September 10, YYYY, Ms. XXXX was examined by Cary XXXX, M.D., at XXXX Health Center, for the complaints of having pain in her neck, left shoulder, and left hip. In addition, she also had left lower back pain radiating in her left leg. On examination, she had decreased range of motion in her left shoulder. She also had weakness in her left hand. She had palpable tenderness in her left lumbar area. She was diagnosed with neck sprain, left shoulder injury, and left sided sciatica. Naproxen, Oxycodone, and Flexeril were prescribed. She was recommended to undergo physical therapy. She was also recommended to not to work for a couple of days. She was advised to follow up as needed.

On September 15, YYYY, Ms. XXXX was examined by Dr. XXXX at XXXX Health Center, for the complaints of having pain in her left shoulder and over her left distal clavicle and left anterior deltoid area. On examination, she had stiffness in her neck, decreased range of motion in her left shoulder and neck. She was diagnosed with left rotator cuff tear. She was recommended to have an MRI of her left shoulder. Ultram was prescribed. She was also recommended to stay off work for four weeks due to her shoulder complaints.

On September 18, YYYY, Ms. XXXX had an initial physical therapy evaluation with Joshua Miller, P.T., at XXXX Rehab Center, for the complaints of having pain in her neck, left shoulder, and lower back. Her Neck Disability Index score was 56%. Her Quick Dash score was 59.09%, and Modified Oswestry Low back pain score was 40%. She had difficulty sleeping, lifting, squatting, kneeling, performing her job duties, laying, grooming, performing her household chores, turning, overhead activities, twisting, and bending due to her pain and weakness. She also had numbness in her left lateral forearm, left sacrum, and left lateral thigh. She reported her pain level as 9/10. On examination, she had palpable tenderness and restricted range of motion over her neck, left shoulder, and lower back. She was given a home exercise program. She was advised to undergo physical therapy two times a week for six to eight weeks.

On September 21, YYYY, an MRI of Ms. XXXX’s shoulder was obtained by Eric Dorn, M.D., at XXXX Health Center. The study revealed an increased supraspinatus signal intensity centered at her myotendinous junction.

On September 22, YYYY, Ms. XXXX had a telephone conversation with Dr. XXXX at XXXX Health Center. Dr. XXXX stated that Ms. XXXX had strain in the large tendons of her left shoulder. She was recommended to continue undergoing physical therapy. She was also recommended to have a follow up with an orthopedic specialist.

On October 2, YYYY, Ms. XXXX had a telephone conversation with Dr. XXXX at XXXX Health Center. She complained of pain in her neck, left shoulder, and lower back along with headaches and nausea. She was recommended to undergo physical therapy. She was advised to follow up in a week.

On October 19, YYYY, Ms. XXXX had a telephone conversation with Gina Schroeter, R.N., at XXXX Health Center. She complained of numbness in her right leg.

On October 22, YYYY, Ms. XXXX was examined by Dr. XXXX at XXXX Health Center, for the complaints of having numbness in her right lower extremity. She also had intermittent pain in her lower back. She reported that she was tripping easily while getting up from a seated position. On examination, she had decreased strength in her left lower extremity. She also had deceased sensation to light touch in the anterior tibial area of her right lower leg. Flexeril, Levonorgestrel, Naproxen, Aldactone, Ultram, and Tretinoin microsphere 0.1 % gel were prescribed. She was recommended to have an MRI of her lumbar spine. She was also recommended to have a spine surgery evaluation. She was advised to continue undergoing physical therapy. She was recommended to have a neurology and physical medicine and rehabilitation referral for possible electromyograms. She was advised to follow up if her symptoms worsened.

On October 29, YYYY, an MRI of Ms. XXXX’s lumbar spine was obtained by Ramin Golchini, M.D., at XXXX Health Center. The study revealed a shallow disc protrusion at L5-S1, mild spinal canal narrowing at L4-L5 and L5-S1, and mild bilateral foraminal narrowing at L5-S1 level.

On November 2, YYYY, Ms. XXXX had a telephone conversation with Amanda Kohlwey, R.N., at XXXX Health Center. She had some mild bulging discs in her lower back which were minimally impacting her spinal cord. She was referred to pain management to receive steroid injections.

On November 9, YYYY, Ms. XXXX had a telephone conversation with Dr. XXXX at XXXX Health Center. She complained of having migraine headaches along with nausea and shaking sensation. She reported the pain level in her head as 9/10. She was referred to neurology to evaluate the migraines as well as the numbness and tingling sensation in her right leg.

On November 24, YYYY, Ms. XXXX was examined by Dr. XXXX at XXXX Health Center, for the complaints of having headaches and numbness in her right leg. She also experienced severe photophobia, phonophobia, dizziness, nausea, shakiness, and neck pain. Amitriptyline, Elavil, and Maxalt were prescribed. She was recommended to have an MRI of her brain. She was advised to follow up in two months.

On December 1, YYYY, an MRI of Ms. XXXX’s brain was obtained by Vladimir Ivanovic, M.D., at XXXX Health Center. The study revealed normal intracranial contents.

On December 22, YYYY, Ms. XXXX was examined by Bhupinder XXXX, M.D., at Advanced Pain Management, for the complaints of having headaches and pain in her neck, left scapula, and left lower back. She also had numbness and tingling sensation in her left arm and right lower leg. She reported her pain level as 5/10. Her pain was aggravated by the activities of her daily living, driving, neck movements, twisting, and weather changes. She had difficulty having consensual relationship and was frustrated and depressed due to pain. On examination of her cervical spine, she had palpable tenderness in her left suboccipital area and lower cervical facets. She also had palpable tenderness in the superior medial margin, as well as along the medial margin of her left shoulder blade. On examination of her lumbar spine, she had palpable tenderness in her L5-S1 spinous process and right sciatic notch. She was diagnosed with left sided neck pain, cervicogenic headaches, left shoulder pain, lower back pain, and right lower extremity pain. She was recommended to receive transforaminal epidural steroid injection at her right L5-S1 level. She was also recommended to receive sacroiliac joint injection. Tramadol and Mobic were prescribed. She was recommended to have an MRI of her cervical spine. She was also recommended to have an electromyography of her right lower extremity. She was advised to have a urine drug screening. She was recommended to receive cervical epidural steroid injection and cervical facet joint injections at her left C2-3, left C5-6 and C6-7 levels.

On December 30, YYYY, an electromyography/nerve conduction velocity study of Ms. XXXX’s right lower extremity was obtained by XXXX, M.D., at XXXX Clinic. The study revealed mild slowing in her right peroneal nerve at her fibular head without change in motor waveform. Normal tibial motor, superior peroneal sensory, and sural sensory conduction were noted. Her right leg and lumbar paraspinals were normal. There was a possible mild right peroneal palsy at her right knee without axonal loss which was clinically resolved. There was a questionable radiculopathy.

On the same day, Ms. XXXX was examined by Dr. XXXX at XXXX Health Center, for the complaints of having headaches and pain in her neck, left shoulder, and right leg despite using Tramadol and Cyclobenzaprine. She also had numbness in her right leg. She had difficulty bending. She was diagnosed with improving foot drop with paresthesias of her right leg. There was a possible right peroneal palsy. She was advised to follow up with Dr. XXXX.

On January 3, YYYY, an MRI of Ms. XXXX’s cervical spine was obtained by Vladimir Ivanovic, M.D., at Community Memorial Hospital. The study revealed mild bilateral foraminal narrowing at her C6-C7 levels.

On January 12, YYYY, Ms. XXXX received a transforaminal epidural steroid injection at her right L5-S1 level under fluoroscopic guidance. Her pre and post-operative diagnoses were lower back pain with right lower extremity pain and numbness, lumbar annular tear L5-S1, and lumbar disc herniation at L5-S1 level. The procedure was performed by XXXX, M.D., at Advanced Pain Management. She was recommended to follow up in two weeks for her second transforaminal epidural injection.

From September 23, YYYY through January 27, YYYY, Ms. XXXX underwent physical therapy from Joshua Miller, P.T., and XXXX, P.T., at XXXX Rehab Center for the complaints of having headaches and pain in her neck, left shoulder, and lower back. She continued having difficulty performing the activities of her daily living, bending, lifting, kneeling, squatting, and overhead activities. Her treatment was comprised of manual therapy, myofascial release, therapeutic exercises, home exercises, dry needling, and ultrasound. She was advised to continue receiving physical therapy.

On February 2, YYYY, Ms. XXXX received a bilateral transforaminal epidural steroid injection at her right L5-S1 level under fluoroscopic guidance. Her pre and post-operative diagnoses were low back pain with right lower extremity pain and numbness, lumbar annular tear L5-S1, and lumbar disc herniation at L5-S1 level. The procedure was performed by Dr. XXXX at Advanced Pain Management. She was recommended to receive a cervical epidural steroid injection in two weeks.

On February 3, YYYY, Ms. XXXX underwent physical therapy from XXXX, P.T., at XXXX Rehab Center for the complaints of having headaches and pain in her neck, left shoulder, and lower back. She had difficulty performing the activities of her daily living, bending, lifting, squatting, kneeling, and performing overhead activities. On examination, she had trigger points in her neck. She had decreased thoracic mobility. Her treatment was comprised of manual therapy, trigger point dry needling, therapeutic exercises, and home exercise program. She was advised to perform home exercises. She was discharged from physical therapy.

On February 23, YYYY, Ms. XXXX received a cervical epidural steroid injection under fluoroscopic guidance. Her pre and post-operative diagnoses were left-sided neck pain, left scapular pain, left upper extremity numbness and tingling, cervical spondylosis, and mild bilateral foraminal stenosis at C6-C7, left greater than right. The procedure was performed by Dr. XXXX at Advanced Pain Management. She was recommended to receive diagnostic cervical zygapophyseal joint injections on her left at C2-C3, C5-C6, and C6-C7 levels. She was advised to follow up in two weeks.

On March 15, YYYY, Ms. XXXX received a cervical epidural steroid injection under fluoroscopic guidance. Her pre and post-operative diagnoses were left-sided neck pain, left scapular pain, left upper extremity numbness and tingling, cervical spondylosis, and mild bilateral foraminal stenosis at C6-C7, left greater than right. The procedure was performed by Dr. XXXX at Advanced Pain Management. She was recommended to receive diagnostic cervical facet joint injections on her left at C2-C3, C5-C6, and C6-C7 levels. She was also recommended to receive her third cervical epidural injection.

On April 19, YYYY, Ms. XXXX received diagnostic cervical zygapophyseal joint injections at her left C2-C3, C5-C6, and C6-C7 levels under fluoroscopic guidance. Her pre and post-operative diagnoses were left-sided neck pain, left scapular pain, left sided headaches, and cervical spondylosis - rule out cervical zygapophyseal joint mediated pain. The procedure was performed by Dr. XXXX at Advanced Pain Management. Tramadol was prescribed. She was recommended to receive second comparative diagnostic zygapophyseal joint injections in order to rule out a placebo effect.

On May 3, YYYY, Ms. XXXX received repeat diagnostic cervical zygapophyseal joint injections at her left C2-C3, C5-C6, and C6-C7 levels under fluoroscopic guidance. Her pre and post-operative diagnoses were left-sided neck pain, left scapular pain, left sided headaches, and cervical spondylosis - rule out cervical zygapophyseal joint mediated pain. The procedure was performed by Dr. XXXX at Advanced Pain Management. She was recommended to receive radiofrequency denervation of her left C2-C3, C5-C6, and C6-C7 zygapophyseal joints.

On June 21, YYYY, Ms. XXXX was examined by XXXX, N.P., at Advanced Pain Management, for the complaints of having pain in her neck and lower back. On examination of her cervical spine, she had palpable tenderness in her left atlanto-occipital segment through C7/T1 segment and her left paraspinal muscles. She had decreased range of motion in her neck. On examination of her lumbar spine, she had palpable tenderness in her left L4/L5, L5/S1, left sacroiliac joint, and paraspinal muscles. She was diagnosed with axial neck pain, chronic migraines, worsening lower back pain with radiculopathy, L5-S1 disc protrusion, possible annular tear, bilateral mild neuroforaminal stenosis, facet arthrosis, and sacroiliac joint dysfunction. She was also diagnosed with intervertebral disc displacement of her lumbar region, dorsopathies of her cervical region, and spondylosis of her cervical region. She was recommended to have a urine drug screening. She was recommended to have an MRI of her cervical spine. She was recommended to receive left C2-C3, C5-C6, and C6-C7 facet injections. She was recommended to have an electromyography study of her right lower extremity. Topamax, Imitrex, Norco, Tramadol, and Mobic were prescribed. She was recommended to receive Botox injections. She was also recommended to receive sacroiliac joint injection.

On July 14, YYYY, Ms. XXXX was examined by Neal Pollack, D.O., at Clinic of Neurology, Ltd., for the complaints of having headaches and pain in her neck and back. On examination, she had palpatory pain in her neck and lower back. She was diagnose with lumbar radiculopathy, cervical occipital neuralgia, migraines, and cervical strain. She was advised to follow up in one week.

On July 27, YYYY, an electromyography and nerve conduction velocity study of Ms. XXXX’s right lower extremity was obtained by Dr. Pollack. The study was normal. She was advised to follow up as needed.

On August 2, YYYY, Ms. XXXX received pressure-controlled diagnostic and provocative lumbar discography at L3-L4, L4-L5 and L5-S1 under fluoroscopic guidance. Her pre-operative diagnoses were lower back pain, left lower extremity pain, and lumbar disc herniation. Her post-operative diagnoses were positive discogram, L5-S1 level and absolute control levels at L3-L4 and L4-L5 levels. There was a posterior tear at L5-S1 level. The procedure was performed by Dr. XXXX at Advanced Pain Management. She was recommended to undergo an automated percutaneous lumbar discectomy at L5-S1 level.

On August 2, YYYY, a CT of Ms. XXXX’s cervical spine was obtained by Djerrick Tan, M.D., at XXXX & Medical College of Wisconsin. The study revealed grade 1 disc at L3-L4, L4-L5, and L5-S1 levels.

On September 20, YYYY, Ms. XXXX received bilateral greater occipital nerve injection under fluoroscopic guidance. Her pre and post-operative diagnoses were upper cervical pain, cervicogenic headaches, and bilateral greater occipital neuralgia left greater than right. The procedure was performed by Dr. XXXX at Advanced Pain Management. She was recommended to undergo an automated percutaneous lumbar discectomy at L5-S1 level.

On October 25, YYYY, Ms. XXXX was examined by XXXX, N.P., at Advanced Pain Management, for the complaints of having headaches and pain in her neck and lower back. She reported her pain level as 8/10. Her pain was aggravated by daily activities. She had difficulty sleeping. On examination, she had palpable tenderness and restricted range of motion in her neck and lower back. Her Oswestry score was 18/45 which indicated mild functional impairment. She had axial neck pain and chronic migraines with vomiting. She was recommended to follow up with Dr. Purath for her headaches. Tramadol was prescribed. She was recommended to receive Botox injections. She was diagnosed with spondylosis with radiculopathy of her lumbar region, intervertebral disc displacement of her lumbosacral region, spinal stenosis, lumbosacral region, migraines, spondylosis of her cervical region, and spinal stenosis of her cervical region. Tramadol and Topamax were prescribed. She was advised to follow up in two to three months.

On December 8, YYYY, Ms. XXXX received automated percutaneous lumbar discectomy at her L5-S1 level under fluoroscopic guidance. Her pre and post-operative diagnoses were low back pain with left lower extremity pain, lumbar disk herniation L5-S1, and lumbar radicular pain. The procedure was performed by Dr. XXXX at Advanced Pain Management. Her lumbar spine was supported with a back brace. She was advised to avoid bending, lifting, and twisting activities. She was advised to follow up on December 13, YYYY.

On December 13, YYYY, Ms. XXXX was examined by XXXX, N.P., at Advanced Pain Management, for the complaints of having headaches and pain in her neck and lower back. She reported her pain level as 8/10. On examination, she had palpable tenderness in her lower back. She was diagnosed with status post percutaneous disk decompression at L5-S1 level. She was instructed to wear a back brace. She was recommended to stay off work until December 19, YYYY. She was advised to follow up in one month.

On January 10, YYYY, Ms. XXXX was examined by XXXX, N.P., at Advanced Pain Management, for the complaints of having headaches and pain in her neck and lower back. She had difficulty bending. On examination, she had palpable tenderness in her neck and lower back. Her Oswestry score was 13/50. She continued having some pain with bending. She was diagnosed with occipital neuralgia, headaches, dorsopathies of her cervical region, intervertebral disc degeneration of her lumbar region, intervertebral disc disorders with radiculopathy of her lumbosacral region, spinal stenosis of her lumbosacral region, and intervertebral disc displacement of her lumbosacral region. Tramadol was prescribed. She was recommended to undergo physical therapy. She was instructed to continue wearing her lumbosacral orthotic brace. She was advised to follow up as needed.

On April 11, YYYY, Ms. XXXX received left greater occipital nerve injection under fluoroscopic guidance. Her pre and post-operative diagnoses were left greater occipital neuralgia resulting in left-sided headaches. The procedure was performed by Dr. XXXX at Advanced Pain Management. She was recommended to receive repeat injection on an as needed basis.

On May 9, YYYY, Ms. XXXX was examined by XXXX, N.P., at Advanced Pain Management, for the complaints of having headaches and pain in her neck and lower back. Her Oswestry score was 4/50, indicating no functional impairment. She was diagnosed with occipital neuralgia, headaches, spinal stenosis of her cervical region, intervertebral disc degeneration of her lumbar region, and spinal stenosis of her lumbosacral region. She was advised to continue performing her home exercise program. She was recommended to take Topamax for her headaches. She was instructed to continue wearing her lumbosacral orthotic brace.

On August 15, YYYY, Ms. XXXX was examined by XXXX, N.P., at Advanced Pain Management, for the complaints of having persistent headaches. She also had neck and lower back pain. She had difficulty walking and sleeping. On examination, she had palpable tenderness and decreased range of motion in her neck and lower back. She was diagnosed with occipital neuralgia, headaches, spondylosis of her cervical region, spinal stenosis of her cervical region, intervertebral disc degeneration of her lumbar region, spondylosis with radiculopathy of her lumbosacral region, and intervertebral disc displacement of her lumbar region. Topamax and Tramadol were prescribed. She was advised to continue performing her home exercise program. She was instructed to continue wearing her lumbosacral orthotic brace. She was advised to follow up in one month.

On September 5, YYYY, Ms. XXXX received left greater occipital nerve injection under fluoroscopic guidance. Her pre and post-operative diagnoses were left greater occipital neuralgia resulting in left-sided headaches. The procedure was performed by Dr. XXXX at Advanced Pain Management. She was recommended to receive left atlanto axial joint injection as well as C3-C4 facet joint injection. She was also recommended to receive transforaminal injection on her left at L5-S1 level in two weeks.

On September 26, YYYY, Ms. XXXX received transforaminal epidural steroid injection at her left L5-S1 level under fluoroscopic guidance. Her pre and post-operative diagnoses were low-back pain with left lower extremity pain, lumbar disk herniation at L5-S1 level, and lumbar foraminal stenosis at her bilateral L5-S1 level resulting in lumbar radicular pain. The procedure was performed by Dr. XXXX at Advanced Pain Management. She was recommended to have a urine drug screening. She was also recommended to have an MRI of her lumbar spine if she had persistent symptoms in her lower back.

On November 2, YYYY, Ms. XXXX was examined by Christa Scheunemann, N.P., at Advanced Pain Management, for the complaints of having pain in her neck and lower back. Her pain was exacerbated by lying down. She reported her pain level as 7-9/10. She was functionally impaired despite receiving therapy, taking medications, and adhering to activity modifications. She was recommended to receive diagnostic facet joint block injection. She was diagnosed with spondylosis without myelopathy or radiculopathy, cervical region, spondylosis without myelopathy or radiculopathy, occipito-atlanto-axial region, and headaches. Tramadol and Trokendi were prescribed. She was advised to continue performing her home exercise program. She was instructed to continue wearing her lumbosacral orthotic brace.

On November 30, YYYY, Ms. XXXX received diagnostic cervical medial branch blocks of her left C2 (third occipital nerve), left C3, left C4, and left C5 medial branch nerves corresponding to her left C2-C3, C3-C4, C4-C5 facet joints under fluoroscopic guidance. The procedure was performed by Dr. XXXX at Advanced Pain Management. Her pre and post-operative diagnoses were spondylosis without myelopathy or radiculopathy of her cervical region and cervical disc degeneration of her cervical region. She was recommended to receive a repeat cervical medial branch block in one to three weeks. Tramadol and Trokendi were prescribed. She was advised to continue performing her home exercise program. She was instructed to continue wearing her lumbosacral orthotic brace.

On December 14, YYYY, Ms. XXXX received diagnostic cervical medial branch blocks of her left C2 (third occipital nerve), left C3, left C4, and left C5 medial branch nerves corresponding to her left C2-C3, C3-C4, C4-C5 facet joints under fluoroscopic guidance. Her pre and post-operative diagnoses were spondylosis without myelopathy or radiculopathy of her cervical region, cervical disc degeneration of her cervical region, and headaches. The procedure was performed by Jeremy XXXX, M.D., at Pain Centers of Wisconsin XXXX. Tramadol and Trokendi were prescribed. She was advised to continue performing her home exercise program. She was instructed to continue wearing her lumbosacral orthotic brace. She was referred to Dr. Purath for her headaches.

On April 17, 2018, a correspondence was drafted by Dr. XXXX at Advanced Pain Management Sheboygan Medical Center regarding Ms. XXXX’s headaches, neck pain, and lower back pain. Dr. XXXX opined that Ms. XXXX would have recurrent flare ups of her neck pain and back pain in the future. She would need preventative and abortive medications for her headaches, the rest of her life. Dr. XXXX also opined that she would need a lumbar fusion during her lifetime which would cost approximately $50,000. Dr. XXXX recommended her to have a permanent restriction of 25 pounds for lifting given the permanent changes to her lumbar spine after her surgery. Dr. XXXX stated that she would require more frequent treatment in the future. Dr. XXXX also opined that additionally, she would develop chronic arthritic pain from the joints in her neck which should also be addressed with radiofrequency ablation as well. Dr. XXXX stated that she might periodically suffer from her neck pain that radiates into her bilateral upper extremities as it is likely that her injury from the accident has accelerated degenerative changes in the discs of her cervical spine. Dr. XXXX stated that she would require three epidural steroid injections on an average every other year costing up to $3,000 per injection. Dr. XXXX also stated that she would likely need a radiofrequency ablation every 1.5 years that might cost in the range of $15,000 per episode. The cost of medication management for her headaches would be approximately $500 per month. Dr. XXXX also opined that she would have reduced earning potential going forward from the need for more frequent medical treatment. Dr. XXXX stated that she had suffered a significant life altering event with associated physical, psychological, emotional, and financial suffering. She would need to limit her activity requiring cervical extension and flexion, and would have the ability to change positions every 30 minutes. She was restricted from weight lifting more than 25 pounds.