

# IN THE SUPREME COURT OF BRITISH COLUMBIA

Citation: *Carver v. Or*,  
2017 BCSC 1496

Date: 20170824  
Docket: M130292  
Registry: Vancouver

Between:

**Steven Frederick Carver**

Plaintiff

And

**Siu Ling Irene Or and Howard Tin Hoo Or**

Defendants

Before: The Honourable Madam Justice Gray

## Reasons for Judgment

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Place and Date of Trial:

Vancouver, B.C.  
January 23-26, 30-31, 2017  
and February 1-2, 2017

Place and Date of Judgment:

Vancouver, B.C.  
August 24, 2017

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**I. INTRODUCTION**

[1] Mr. Carver was injured in a motor vehicle accident on February 28, 2011 (the “Accident”), over six years ago. His claim for damages proceeded to an eight-day trial.

[2] There are three main issues in this lawsuit. First, are the defendants responsible for the Accident, and if so, are they wholly or only partially at fault? Second, would Mr. Carver have suffered the same symptoms even if he had not been injured in the Accident, owing to his condition prior to the Accident? Third, what is the appropriate assessment of Mr. Carver’s damages, and should they be reduced on the basis that he failed to mitigate his losses?

[3] Both before and after the Accident, Mr. Carver has suffered from pain in his lower back with radiation to his lower legs. His biggest complaint is the lower back pain, which has been much more severe since the Accident and led him to stop working. The expert medical evidence is in conflict over whether Mr. Carver would be in the same condition he is in now, had the Accident not occurred.

[4] In the opinion of Dr. Adrian, Mr. Carver’s treating physical and rehabilitation medicine specialist (physiatrist), it is unlikely that Mr. Carver’s pre-Accident symptoms would have spontaneously worsened and become physically limiting, had it not been for the Accident. Dr. Tarazi, an orthopaedic surgeon who testified at the request of Mr. Carver’s counsel, has a similar opinion. In contrast, in the opinion of Dr. Street, the orthopaedic spine surgeon who prepared an independent medical report at the request of the defence, Mr. Carver is likely to have ended up in his current state, or at least very close to it, absent the Accident. Drs. Adrian and Street differ on their interpretation of Mr. Carver’s pre-Accident condition and of an MRI of March 18, 2013 of his lumbar spine.

**II. FACTS**

**A. Before the Accident of February 28, 2011**

[5] Mr. Carver completed high school and then held a variety of jobs. He worked as a musician, machinist, in construction, picking fruit, and gardening. He does not have a trade qualification as a machinist. Around the 1980s, he and another person started their own business, Van-Go Installations, installing appliances and showers in new condominiums.

[6] Mr. Carver married Ms. Carver in October, 1991. They are still married but they have been separated since 2006. They have an amicable relationship as parents of their two daughters, and they have remained in regular contact.

[7] In the mid-1990s, Van-Go failed, and Mr. Carver declared bankruptcy.

[8] Mr. Carver's two daughters were born in 1996 and 2001. At the time of trial they were 20 and 15 years old, respectively.

[9] Mr. Carver started working as a machinist for Optimil Machinery Ltd. ("Optimil") in September 1997, about 13 ½ years prior to the Accident. He was a computer numerical control ("CNC") lathe operator. He worked full-time, and sometimes worked overtime. He did not like to take overtime very often because it interfered with his time with his daughters.

[10] Optimil is a custom designer and manufacturer of machines for sawmills, with customers worldwide. The machines scan logs optically and determine the optimal way to cut the log. Optimil makes all the parts, including the pneumatic parts, hydraulic parts, wheel bearings, cylinder housings, piston rods, and screws.

[11] Mr. Carver's role was to make the parts that went into the Optimil machines. He made parts which varied in size from small to large. His work station had a big lathe and a turning machine. He would manoeuvre parts into a chuck, program his machine for the part, and run the needed number of parts. He would usually collect precut metal raw material with a forklift. If it was heavy, he would use a hoist or

crane to bring it to the necessary height, force the item into the jaws of a clamp and clamp it, and then machine the item. If the raw material was light, he would pick up the raw material by hand. He would lean over to position the raw material.

[12] Mr. Carver's work required a lot of bending and lifting, and parts could range up to 60 or 70 pounds.

[13] There is a significant learning curve in becoming a CNC operator, and as a result, Optimil tends to have a lot of older employees. Mr. Carver's foreman is 66 years old, and the lead hand machinist is 70 years old. Of Optimil's 35 machine shop workers, five to seven are over age 65.

[14] Mr. Carver enjoyed his work for Optimil and considered it the best job he ever had. His employer was happy with his performance. Mr. Carver saw himself possibly working to age 70 as well.

[15] Mr. Carver's non-work activities prior to the Accident included working in his rose and vegetable gardens and doing activities with his children, such as an annual camping trip, which included hiking and fly fishing. He regularly took his daughters swimming and attended their soccer games, watching entire games.

[16] Mr. Carver drank alcohol heavily before the Accident. He drank most evenings after work, but did not allow himself to be impaired at work. He estimated that he drank about 12 ounces of hard liquor daily before the Accident. He also smoked marijuana two or three times a week, usually on the weekend. He also smoked one or two packages of cigarettes a day.

[17] Before the Accident, Mr. Carver was diagnosed with sleep apnea, and used a machine when sleeping. He had asthma. He had developed chronic obstructive pulmonary disease ("COPD"), and as a result, he experienced some shortness of breath.

[18] Mr. Carver experienced some backache in the years prior to the Accident. He estimated that he had back pain off and on starting in about 2006, being five or six

years before the Accident. He testified that if he was working really hard, towards the end of the day he might get a twinge in his back and legs.

[19] As stated, Mr. Carver and his wife separated in 2006. At that time, their daughters were about five and ten years old. Mr. Carver and his wife arranged that Mr. Carver's parenting time would be Wednesdays for supper, the entirety of every weekend, and two weeks in the summer. Mr. Carver would also stay overnight at Ms. Carver's home on Christmas Eve in order to be present on Christmas morning. That parenting time arrangement continued until the Accident.

[20] Mr. Carver's income in 2006 was \$54,813, in 2007 it was \$58,609, and in 2008 it was \$54,823.

[21] Mr. Carver did not have a family doctor prior to the Accident. If he had medical issues, he went to Seafair Medical Clinic ("Seafair"). He went to Seafair four times in 2009 and early 2010 without making any complaints of back pain.

[22] At some point in 2009, Mr. Carver fell and could not get up and obtained assistance from emergency responders. He fell primarily from leg weakness, but testified that he was "very, very drunk" at the time.

[23] Mr. Carver's income in 2009 was \$48,513, which is less he had earned in each of the prior three years. Optimil had less work in 2009 than previously, owing to the worldwide recession, and instituted a program by which employees worked only three or four days a week or were laid off, until Optimil regained orders.

[24] Since mid-2010, Optimil has been working at full capacity.

[25] Mr. Carver worked full-time for the period from about mid-2010 until the Accident.

[26] Mr. Carver lives in the lower level apartment of a fourplex in Richmond, B.C. Before the Accident, he routinely washed his kitchen floor every two weeks, vacuumed weekly, and washed his bedclothes weekly.

[27] Mr. Carver's home has a large back yard. Before the Accident, he mowed the lawn and cared for a vegetable and rose garden. It was his landlord's responsibility to mow the lawn, but Mr. Carver preferred to do it to avoid the landlord traipsing through his yard.

[28] In the spring and summer of 2010, Mr. Carver had to stop more frequently than before while gardening, due to back pain.

[29] On July 2, 2010, about six months before the Accident, Mr. Carver made his first complaint to a doctor about back pain to Dr. Varma at Seafair. Dr. Varma's notes include the following:

states back pain for 5 mos., noticed pain in lower back if stands in certain positions; pain radiates down lateral aspect of legs; [illegible] pain near kidneys when sleeping for 2 wks, if takes deep breath, esp in bed, feels more pain

...

low backache radiates to calves x few yrs, worse x 1 yr

[30] Dr. Varma noted that Mr. Carver had a full range of motion, but pain on extension. Dr. Varma suggested Advil and glucosamine and discussed weight loss, and sent Mr. Carver for an X-ray.

[31] The X-ray report regarding the examination of July 5, 2010 includes the following:

... Exaggeration of the usual lumbar lordosis is noted, but alignment is otherwise within normal limits. Mild wedging of the L-1 and L-2 vertebral bodies is present, of indeterminate age, with the remainder of the vertebral body heights well maintained. Mild narrowing of the disc spaces is seen throughout the lumbar levels. The posterior elements appear intact and the SI joints are unremarkable.

**Impression**

Mild wedge compression fractures of the L-1 and L-2 vertebral bodies of indeterminate age. Mild spondylitic change throughout the lumbar levels.

[32] Mr. Carver and Ms. Carver saw each other about three times a week in 2010 in connection with parenting their daughters. They would interact usually for ten or

15 minutes each time, although occasionally they would have dinner together with the girls.

[33] Ms. Carver was hospitalized on September 3, 2010 for major surgery, and remained in hospital for a month. Mr. Carver took his daughters to hospital to see their mother almost daily, and the girls stayed with him during this period. Ms. Carver's recovery took about seven months, ending about two months after the Accident.

[34] Mr. Carver saw Dr. Varma at Seafair on October 20, 2010. The notes refer to discussing the X-ray report, although Mr. Carver does not remember that. Dr. Varma prescribed glucosamine, Advil 600 mg/day as needed, and to lose weight.

[35] Dr. Varma gave Mr. Carver a copy of the X-ray report. He interpreted it as meaning that he had mild arthritis and mild compression fractures.

[36] Mr. Carver went once to a chiropractor, Dr. Colin MacKay, on October 21, 2010. Mr. Carver's chief complaint was lower back pain, and he told Dr. MacKay that it could have been going on for years.

[37] Dr. MacKay wrote that Mr. Carver's pain intensity was "dull, sharp increase periodically" and frequency was three to five times per day. Mr. Carver agreed that, at the time, his pain was aggravated by standing and relieved by stretching. Dr. MacKay made reference to compressed vertebrae L1 and L2, which Mr. Carver guesses he described from the X-ray. Dr. MacKay made a reference to osteoarthritis at L5, but Mr. Carver was not sure what that referred to. Mr. Carver testified that Dr. MacKay tried for about five minutes to manipulate his spine but was unable to do so. Mr. Carver did not go back to Dr. MacKay because he could not see any benefit to this treatment.

[38] Mr. Carver's income in 2010 was \$52,187.

[39] Mr. Carver saw Dr. Varma on January 10, 2011, who noted that Mr. Carver's low backache had been ongoing for about one year, and would radiate into both

legs, as far as his lower calves. The doctor noted it was “getting worse”, and that his symptoms also included numbness in the feet sometimes and “legs give out - if stands long time”. Dr. Varma recommended that Mr. Carver seek physiotherapy.

[40] Mr. Carver testified that at that point he thought his back pain was getting worse, but some days were worse than others.

[41] Mr. Carver testified that, prior to the Accident, he sometimes stumbled when his legs gave out. In describing his symptoms to Dr. Tarazi, an orthopedic surgeon examining him at the request of the defence, in August 2016, Mr. Carver referred to his symptoms as “back spasms” that occurred about twice a month, involving pain in both legs and occasional numbness in his feet.

[42] Mr. Carver commenced physiotherapy treatment at Richmond Physiotherapy around the end of January 2011, about five weeks prior to the Accident. Mr. Carver showed the physiotherapist a copy of the X-ray report. The intake form refers to a treatment plan of twice a week for five weeks and to an impression of “degenerative L-spine wedge #L1/L2”.

[43] One of the symptoms that Mr. Carver reported to the physiotherapist, Ms. Barer, at a visit around the end of January 2011, was testicular aching. Ms. Barer made notations of a query relating to “testicular numbness - ? *cauda equina* impingement”. Mr. Carver testified that at that time he had aching testicles, but it was a passing complaint. There were no further notations in any medical records regarding “*cauda equina* impingement” or neurological symptoms involving Mr. Carver’s testicles.

[44] Mr. Carver had six physiotherapy treatments before the Accident, and at four of them he reported that his symptoms were improving. He made reports of improvement at the visits on February 3, 14, 21, and 28, 2011.

[45] The physiotherapist worked mostly on releasing Mr. Carver’s hamstrings and calf muscles, which Mr. Carver understood was intended to assist his back problem. The physiotherapist also placed electrodes on Mr. Carver’s back. Mr. Carver testified

that he discussed with his physiotherapist reducing the number of visits, and Mr. Carver thought he was getting slowly better.

[46] Ms. Carver considered Mr. Carver to be very strong and capable prior to the Accident, and did not recall him having any physical limitations. She considered him more muscular than fat. She was not aware of Mr. Carver's pre-Accident back pain, difficulties while gardening, or physiotherapy treatments.

[47] Mr. Carver did not miss any work owing to back pain prior to the Accident. He planned to work as long as he could. His savings had been depleted by his bankruptcy in the mid-1990s.

[48] Mr. Wilkins, plant manager for Optimil, interacted with Mr. Carver for a few minutes each week. He considered Mr. Carver to be a low maintenance employee who did not complain or make demands.

[49] Mr. Carver's habit was to keep his car in good working order. He could see the reflection of his brake lights in the window of the house when he drove out of his driveway. In the period prior to the Accident, he did not see that either of his brake lights was not reflected in the window. No one told him before the Accident that either his brake lights or his turn signals were not working. The signal light did not make a noise indicating that it was not working properly.

[50] On the day of the Accident, Mr. Carver was 56 years old. His daughters were about ten and fifteen years old, respectively.

[51] Mr. Carver worked a normal shift on February 28, 2011. He then went to a physiotherapy appointment. At that time he was going for physiotherapy only once a week, but had not discussed a discharge plan. The treatment focussed on his hamstring and calf muscles, and electrodes were placed on his back. The physiotherapist noted "slight soreness post treatment, but felt better - 2 days later, feeling improvement".

**B. The Accident of February 28, 2011**

[52] At the time of the Accident, Mr. Carver was on his way home, waiting to turn into his driveway.

[53] Mr. Carver was driving his 2000 Toyota Corolla (“Corolla”) westbound on Francis Road, in Richmond, B.C., at about 5:30 p.m. The weather was clear and sunny and it was still daylight. Mr. Carver’s destination was his home on Francis Road. At that location, Francis Road has two lanes of traffic each way.

[54] Mr. Carver’s evidence is that he proceeded along Francis Road past No. 2 Road in the right of the two westbound lanes, in order to avoid becoming delayed behind left turning vehicles at No. 2 Road. He testified that after crossing No. 2 Road at a speed of 55 to 60 km per hour, he immediately turned on his signal to indicate a left turn and changed lanes into the left westbound lane. He testified that he travelled in that lane for ten to 20 seconds before stopping his car in preparation for his left turn across the two eastbound lanes into his driveway. He testified that his driveway was in about the middle of that city block, about eight to ten homes west of the corner of No. 2 Road and Francis Road.

[55] Mr. Carver testified that he applied his brakes normally and slowed to a full stop. He testified that he waited for eastbound traffic on Francis to pass with his left turn signal turned on, blinking at the normal speed. He testified he saw in his rear-view mirror that a car was “bearing down on him” and he did not think it was going to stop, so he braced himself. Mr. Carver testified that when he had been stopped for about 15 seconds, his car was stuck in the rear by the car driven by Ms. Or. Mr. Carver described the impact as a “solid jolt” that may have moved his car forward about six inches even though his brakes were solidly on.

[56] Ms. Or was driving a 2002 Jaguar S-type sedan. Ms. Or’s evidence is that she was driving westbound on Francis Road with her son, on the way to his soccer practise. She testified that she was driving at about 50 km per hour, and she drove past No. 2 Road.

[57] Ms. Or testified that about two to three seconds after she passed through the intersection, she saw that the car in front of her was stopped without a signal light on. She testified that the car was stopped about four to five houses after the intersection with No. 2 Road, and that the first time she saw the Corolla, it was stopping. She testified that she braked and veered to the right in an effort to avoid hitting the Corolla, but the front driver's corner of her Jaguar struck the rear passenger corner of Mr. Carver's Corolla.

**C. Following the Accident of February 28, 2011**

[58] Mr. Carver testified that he "didn't feel anything" until the next morning when he tried to get up for work.

[59] Mr. Carver testified that on that following morning, March 1, 2011, he felt excruciating pain in his back, shooting down to his legs, and mostly in his lower back. He described it as being the same pain as he had experienced prior to the Accident, but more intense. Mr. Carver did not go to work on the day after the Accident owing to his pain. He went to an ICBC Claim Centre and reported the Accident. He provided a written statement to ICBC (the "Statement").

[60] Mr. Carver's Statement said that his back had started to act up very badly for about one or two years, and he finally decided to see his doctor. Mr. Carver's Statement includes the suggestion that years of lifting dryers might have caused compression fractures in L1 and L2. However, that is speculation on Mr. Carver's part and is not of probative value.

[61] At one of his first visits to Seafair after the Accident, Mr. Carver reported that his lower back (not just his legs) had been getting better just before the Accident.

[62] The left front part of the Jaguar was damaged. The cost of repairs to the Jaguar was estimated at over \$11,000, and the vehicle was written off as a total loss. Neither Ms. Or nor her son were injured in the Accident.

[63] There was significant damage to the right rear part of the Corolla. The damage to Mr. Carver's Corolla was repaired at a cost of about \$4,600.

[64] Ms. Or received a ticket for following Mr. Carver's vehicle too closely. She did not dispute it because she did not want to take time away from her children or work to do so.

[65] Mr. Carver returned to work on the second day after the Accident. He then worked for two days, and worked part of a third day. He took the following week off work. He worked for four days, and then took the next Friday and Monday off. He worked for two days and took a day off, and then worked one day, and took a day off. He found that the longer he worked, the more his back hurt.

[66] There was a further X-ray of Mr. Carver's lumbar spine on March 7, 2011. The report includes the following:

**Comparison** - Previous 5<sup>th</sup> of July 2010

**Findings**

...There is a slight retrolisthesis of L2 on L3 noted by approximately 2 mm. This is unchanged from the previous.

...

There appears to be mild wedging of the L1 and L2 vertebrae unchanged from the previous.

Increased density superimposed on the lower facet joints is consistent with facet arthropathy.

Wedging of the lower thoracic vertebrae and osteophytosis is noted unchanged from the previous.

**IMPRESSION**

The findings are favoured to be unchanged from the previous. Previously described mild wedging of L1 and L2 is again noted age and etiology indeterminate. Other findings are favoured to be stable. If concern exists regarding the underlying neurologic architecture, or concern exists regarding disc pathology, consideration could be given to a focused CT study.

[Underlining added]

[67] There was a CT study of Mr. Carver's lumbar spine, from L3 to S1, on April 3, 2011. The report includes the following:

FINDINGS: Sagittal reconstructions demonstrate preservation of vertebral body heights. Slight narrowing of the intervertebral disc space is noted at L4/5.

L3/4: Some mild generalized disc bulge not causing any significant central canal, or neuroforaminal narrowing.

L4/5: Some mild generalized disc bulge, not causing any significant central canal, or neuroforaminal narrowing. Mild ligamentum flavum hypertrophy is evident. Preservation of epidural fat is noted at this level. Moderate facet arthropathy is seen.

L5/S1: No significant central canal, or neuroforaminal narrowing. Moderately advanced facet arthropathy is noted at this level more pronounced on the left than the right.

IMPRESSION:

Degenerative changes as described with no significant stenosis demonstrated.

[Underlining added]

[68] There was a further CT study of Mr. Carver's lumbar spine, from T12 to L3, on April 26, 2011. The report includes the following:

FINDINGS: There does appear to be a very mild anterior wedging of both L1 and L2. This is indeterminate in origin. It may reflect the consequence of previous trauma, however, theory (sic) normal variant could give this appearance. If there is a need to confirm the absence of an acute compression fracture, consideration could be given to Nuclear Medicine bone scan.

At the T12/L1 disc level is noted a moderate loss of disc height with moderate to marked marginal osteophytosis. There is mild facet arthropathy noted.

At the L1/2 disc level is noted a moderate loss of disc height with moderate marginal osteophytosis. There is a mild posterior disc bulge noted resulting in mild thecal sac flattening. The exiting nerve roots are clear. Mild facet arthropathy is noted.

At the L2/3 disc level is noted a moderate loss of disc height with a vacuum phenomena. Mild to moderate marginal osteophytosis is noted. Mild posterior disc bulge is identified yielding mild thecal sac flattening. The exiting nerve roots are clear. Mild facet arthropathy is noted.

IMPRESSION: Mild disc findings as above. Other findings as above some which benefit for further characterization as described.

[Underlining added]

[69] There was a bone scan of Mr. Carver's spinal column on May 25, 2011. The report included the following:

... No hyperemia of the lumbar vertebrae is noted to suggest acute compression fracture.

... There is no intense activity involving L1 or L2 to suggest acute or subacute compression fracture. Mild spondylitic changes are noted in the lower dorsal spine as well as the thoracolumbar junction. Prominent facet joint arthropathy is present at L5-S1 bilaterally. There is further spondylitic change in the upper cervical spine on the left.

...

Tomographic images of the spinal column were also performed.

These demonstrate the extensive paravertebral spurring at multiple levels particularly along the right lateral aspect of the lower thoracic spine as well as at the thoracolumbar junction. Prominent facet joint arthropathy lower lumbar region is noted. No linear increased activity to suggest acute compression fracture is noted.

[Underlining added]

[70] Since around the time of the Accident, Mr. Carver's parenting time has been weekends with his younger daughter, and on and off during the week with his older daughter. He has stopped going to pools with his daughters. He once tried to go camping with them but found it was a "disaster", because he had to tell the girls what to do and he could not hike or fish. He occasionally watches part of one of his daughters' soccer games, but only stays for about 30 minutes because of his difficulty standing or sitting in one spot.

[71] Mr. Carver's weight on March 26, 2011 was measured at 260 pounds.

[72] Mr. Carver started physiotherapy in late March 2011, and continued this treatment until October 24, 2011. He attended a total of 36 treatments. He improved a bit during the first six months after the Accident. On June 20, 2011, he reported that pain was becoming intermittent.

[73] Mr. Carver dealt with his pain by gradually increasing his consumption of alcohol to about double what it had been prior to the Accident. He did not take the pain medication recommended by doctors because he understood there could be a negative interaction, and he preferred to drink alcohol rather than take pain

medication. Mr. Carver continued to use marijuana, sometimes for pain relief and sometimes for recreation.

[74] In June of 2011, Mr. Carver took a trip to visit his parents in Rochester, New York, U.S.A. This involved a flight to Chicago lasting about four and one-half or five hours, followed by a connecting flight lasting about 3 hours. Mr. Carver testified that his pain was not so bad on the flight, but he had to get up often. He found that walking in the terminals increased his leg pain.

[75] At his physiotherapy treatments on June 20, 2011, June 22, 2011, and July 4, 2011, Mr. Carver felt that the treatment was improving his lower back.

[76] The physiotherapy records for Mr. Carver's August 3, 2011 treatment confirmed that Mr. Carver reported that the physiotherapy treatment was helpful, he was feeling better overall, and work was going well. Mr. Carver believes that he was performing only light duties at the time.

[77] Mr. Carver's treatments at Richmond Physiotherapy ended in October 2011. At that time, he had experienced improvement in the pain in his lower back and the pain radiating into his legs. On October 6, 2011, he reported that he was not having so many bad days, and he did not have numbness or tingling.

[78] On November 1, 2011, Mr. Carver commenced an active rehabilitation program with CentriX. The initial therapy was gym-based, with supervision by a therapist. He attended 43 sessions between November 1, 2011 and May 1, 2012. Mr. Carver testified that the gym exercises were hard on him.

[79] Mr. Carver testified that his improvement plateaued, and he could not recall when that occurred.

[80] Mr. Carver's income in 2011 was \$32,524. This represented two months of full-time work followed by ten months of working intermittently.

[81] In 2011 and 2012, Optimil had eight CNC lathe operators. Mr. Carver and two others were not trade-certified, and five were ticketed journeymen.

[82] Mr. Carver attempted to return to working at his job. For about a year after the Accident, he worked part days, or partial weeks, or alternating weeks. This pattern continued for about 13 months, with Mr. Carver returning to work, but then taking off a day or days and sometimes even a week.

[83] Mr. Carver was not able to sustain working. He stopped working in April 2012 and has not worked since then. He testified that he stopped working because the work “wasn’t helping my back”. There is no record of him seeking advice from a doctor about whether to stop work.

[84] Mr. Carver sought a regular primary care physician. He initially saw Dr. Stanley Hurwitz in July 2012, who focussed on his smoking.

[85] In the period October 2012 through January 2013, Mr. Carver attended pool-based rehabilitation with CentriX. He attended 21 sessions between October 15, 2012 and January 18, 2013. This consisted of exercises in the pool followed by time in the hot tub to loosen his muscles.

[86] Mr. Carver understood that he was covered by his wife’s extended medical benefit program, and that it would contribute something to physiotherapy treatments. He did not pursue physiotherapy treatments because he thought they were for soft tissue injuries and he thought he had a bone injury.

[87] Mr. Carver saw Dr. Kherani, a rheumatologist, once, on December 17, 2012. Dr. Kherani reported Mr. Carver’s weight as 131.5 kg., being about 289 pounds. That is about 30 pounds more than his weight about a month after the Accident. Dr. Kherani provided the following summary:

This 58 year-old gentleman with a history of previous traumatic fractures, COPD, hypertension, hyperlipidemia, has had ongoing lumbosacral junction pain with some radiation in a non-anatomic fashion to the posterior thighs and calves with evidence of peripheral osteoarthritis and radiographic evidence of multilevel anterior bridging osteophytes consistent with a variant of osteoarthritis known as diffuse idiopathic skeletal hyperostosis (DISH). There is no clear evidence of an associated inflammatory arthritis. There do not appear to be radicular symptoms on examination. He also has evidence of hip abductor weakness ...”

[Underlining added]

[88] Mr. Carver's income in 2012 was \$4,322. This represented Mr. Carver's work at Optimil until April 2012.

[89] After Mr. Carver's pool therapy ended in early 2013, he went on his own a couple of times for pool exercise. He also rode a mountain bicycle which was mounted as a stationary bicycle at his home, and tried to continue using that over the years.

[90] Mr. Carver wanted a doctor who would focus on his back pain, and obtained a referral to Dr. Polyhronopoulos.

[91] Dr. Polyhronopoulos is a general practice physician with a special interest in treating patients with musculoskeletal issues. He acted as Mr. Carver's family doctor for his back problems, while other doctors would treat Mr. Carver for other health issues. Dr. Polyhronopoulos saw Mr. Carver roughly annually, on March 5, 2013, April 5, 2013, October 1, 2014, November 4, 2015, and March 2, 2016.

[92] MRI imaging was performed on Mr. Carver's lumbar spine on March 18, 2013. The report includes the following:

**Findings:** ...

Osseous alignment is normal. There are no fractures. There is no bone marrow edema.

The conus medullaris terminates at roughly the level of the L1/2 intervertebral disc. Beyond the tip of the conus medullaris, there is dramatic clumping of cauda equina nerve roots extending throughout the length of the lumbar spine to the L5/S1 disc. This will be discussed in detail later in the report. The conus itself is normal in appearance. ...

L1/2: There is pronounced intervertebral disc space narrowing. There is a moderate-sized generalized posterior disc/osteophyte complex. There is moderate facet osteoarthritis. This combination of factors results in a moderate degree of spinal canal stenosis (there is likely a component of congenital spinal canal narrowing as the disc protrusion, though moderate in size, is not thought to be severe enough to cause a moderate spinal canal stenosis in a normal sized canal). There is no foraminal stenosis. There is bone marrow edema involving the left anterolateral aspect of the L2 vertebral body. This is felt to reflect reactive changes due to spondylosis as opposed to being a reflection of fracture. Pronounced sclerosis is present on the CT scan in the area of bone marrow edema on April 26, 2011, an expected finding with severe vertebral end plate reactive changes in spondylosis.

L2/3: There is pronounced disc space narrowing with associated vertebral end plate irregularity. There is a moderate-sized broad-based posterior disc bulge. There is advanced facet osteoarthritis. Moderate spinal canal narrowing is present, with flattening of the AP dimension of the thecal sac to less than 6 mm. Pronounced crowding of traversing nerve roots is present. There is mild bilateral neural foraminal narrowing.

L3/4: There is disc desiccation and a mild generalized posterior disc bulge. There is moderate left and mild right neural foraminal narrowing. There is advanced bilateral facet osteoarthritis. There is a moderate spinal canal stenosis.

L4/5: There is pronounced intervertebral disc space narrowing. There is severe bilateral facet osteoarthritis. A mild generalized posterior disc bulge is present. This combination of factors results in a moderate spinal canal stenosis. Moderate bilateral neural foraminal stenoses are present.

...

Impression: Advanced lumbar spondylosis as described with multilevel moderate spinal canal stenoses. Severe crowding of lumbar nerve roots due to the widespread nature of the spinal canal narrowing.

[Underlining added.]

[93] In summary, this MRI report shows spinal stenosis, or narrowing, at multiple levels of Mr. Carver's lumbar spine. The report makes one reference to "dramatic clumping" of nerve roots extending throughout the length of the lumbar spine to the L5/S1 disc, but in other places refers to "crowding". It shows that the worst area of facet arthritis and disc bulging was at the transition zone at L1-L2, which is between the thoracic spine and the lumbar spine.

[94] In April 2013, Mr. Carver was provided with vocational assistance from CentriX. Mr. Webber of CentriX assisted Mr. Carver by creating resumes and cover letters to assist him with a job search.

[95] Around that time Mr. Carver did a few hours of contract work for Optimil, assisting a new employee to learn how to use the CNC lathe machine.

[96] Mr. Carver considered that he might be able to work in a logistics position with a trucking company, driving for a trucking company, or working as a driving examiner or chauffeur. Mr. Carver called six or seven companies and inquired about employment. He only found one possible logistics opening and thought the employer sounded "shady". He was advised that the trucking and chauffeur positions would

likely require him to move loads and baggage, and he did not think he could do that. He was advised that working as a driving examiner would require him to climb in and out of vehicles of various sizes, and was concerned that he would have difficulty climbing into small vehicles.

[97] Mr. Carver did not take any steps to look for work after May 2013 because he could not think of any paid work he was suited to do. He looks online occasionally for something that might look interesting to him, but he has not found anything to pursue.

[98] Mr. Carver was a front-seat passenger in his Corolla on July 10, 2013 when one of his daughters was driving. Mr. Carver's Corolla rear-ended another vehicle, sliding under the fender of the vehicle in front. The front of the Corolla crumpled, but the air bags did not deploy. Mr. Carver's vehicle sustained significant damage to the front, and the vehicle was considered a total loss. Mr. Carver did not consider that he was injured in this accident, and he did not mention it to Dr. Adrian when he saw him about two weeks later, on July 22, 2013.

[99] In August 2013, Mr. Carver and his daughters went to Kauai, Hawaii, for a vacation. Ms. Carver joined the family for the final week of the trip. During that week, Mr. Carver stepped the wrong way and his legs gave out with the pain. He fell and fractured his left wrist. When he returned to Canada, the wrist was put in a cast, which remained in place until about the end of September 2013. The injury had a significant impact on his self-care and his activities of daily living because he could only use his right hand. He did not go to the pool when his wrist was in a cast.

[100] Mr. Carver's income in 2013 was \$2,020, and in 2014 it was \$554.

[101] Mr. Carver had epidural steroid injections on January 11 or 13, 2014, January 21, 2015, and June 4, 2015. Each reduced his pain for a few days.

[102] In February 2015, Mr. Carver developed pneumonia and was hospitalized for two months. He underwent a tracheotomy and was bedridden while in hospital. He

weighed 309 pounds on admission and 280 pounds when he was discharged in April. Mr. Carver is about 6 feet tall.

[103] While hospitalized, a psychiatrist prescribed Venlafaxine, an antidepressant. During the hospitalization, Mr. Carver quit smoking and drinking, and has remained abstinent since then. While he continues to use marijuana, he vaporizes it rather than smoking it. He has suffered less shortness of breath since he quit smoking.

[104] Mr. Carver had difficulty walking following the period he was hospitalized. For a period following his discharge from hospital, he used a walker, a bench in the shower, and a stool for the toilet. After a short period, he stopped using the walker, bench, and stool, and started using a cane for walking. He does not recall how long it took him, following the hospitalization, to return to the activities he did prior to the Accident, but it might have taken until December 2015.

[105] Mr. Carver filled the prescription for the antidepressant Venlafaxine 12 times over the period from April 12, 2015 until September 8, 2015.

[106] Mr. Carver first filled a prescription for Gabapentin on December 3, 2015.

[107] Mr. Carver first filled a prescription for Tramadol/ac on August 24, 2016. Tramadol is an opioid pain medication.

[108] Mr. Carver had a facet joint nerve block injection on October 31, 2016. It gave him some relief for about a month.

[109] In the 20-month period from April 2015 to December 2016, Mr. Carver incurred \$934 in pain medication costs. At that rate, he is spending about \$560 per year on pain medication.

[110] Optimil's most profitable year so far was 2016.

[111] Mr. Carver spends about \$350 per year on marijuana. He does not have a medicinal license or a prescription for it.

**D. At Trial**

[112] At the time of trial, Mr. Carver was 62 years old. He testified that he is in constant pain and takes Tramadol and Gabapentin every night. He had recently been diagnosed with type 2 diabetes. It was well-controlled by diet changes and medication.

[113] The evidence was unclear about Mr. Carver's exact weight, but he is significantly overweight. He estimated that he had gained 40 to 60 pounds since the Accident, in which case his weight at trial would be about 300 to 320 pounds.

[114] Mr. Carver cannot walk very far and cannot stand or sit for very long. He testified that he can only walk for four or five minutes before he needs to stop for a rest. He uses a cane when walking for very long. Mr. Carver breaks up his daily home care activities in order to take breaks. He shops more frequently so that his loads are lighter.

[115] Mr. Carver's typical day is waking, breakfast, coffee, looking at his iPad, sitting and watching television, tidying up, and taking an afternoon nap in his chair. His sleep is interrupted frequently by pain.

[116] Mr. Carver can no longer go camping or fishing or work in his garden. He stopped mowing the lawn.

[117] Mr. Carver can cook and wash dishes, but cannot clean his floors. He can vacuum if he takes frequent breaks. He can do his laundry, but does it in small loads so it is not too heavy for him. He had not washed his kitchen floor for months and had not vacuumed in a month. His daughter sometimes helps him with these chores.

[118] Mr. Carver remains abstinent from alcohol and cigarettes. His depression is well-managed.

[119] Mr. Carver was waiting to speak to his doctor about the possibility of undergoing a radio frequency treatment to deaden his nerves and relieve his pain for up to years at a time.

**III. EXPERT EVIDENCE**

[120] The expert evidence included evidence from medical doctors, vocational consultants, and economists.

**A. Medical Evidence**

[121] Mr. Carver relied on reports from the following medical experts:

- a) Dr. Mark Adrian, physical medicine and rehabilitation (physiatry);
- b) Dr. Fadi Tarazi, orthopaedic surgeon; and
- c) Dr. Paul G. Janke, psychiatrist.

[122] The defence relied on reports from the following medical experts:

- a) Dr. Christopher Carlsten, respirologist; and
- b) Dr. John Street, orthopaedic surgeon.

[123] I will first discuss the evidence of Drs. Adrian, Tarazi and Street, followed by the psychiatric and respirological evidence.

**1. Dr. Adrian, Physiatrist**

[124] Dr. Adrian is a physiatrist. He has fellowship training in the subspecialty of spine, musculoskeletal, and sports medicine. He has a certification in the subspecialty of pain medicine from the American Board of Anesthesiology. The emphasis of his clinical practice involves the assessment and management of spine, musculoskeletal, and musculoskeletal-related neurologic disorders.

[125] Dr. Adrian is Mr. Carver's treating physiatrist. He prepared reports at the request of Mr. Carver's counsel. Dr. Adrian first saw Mr. Carver on July 22, 2013, on referral from Dr. Polyhronopoulos. Dr. Adrian saw Mr. Carver four times before preparing his medical-legal report.

[126] Dr. Adrian reviewed Seafair's records from before the Accident. Dr. Adrian's interpretation of the records is that Mr. Carver's symptoms were progressing in intensity in the year leading up to the Accident. However, in his view, the Seafair records of pain worsening seem to conflict with the Richmond Physiotherapy records prior to the Accident, which is consistent with a stable back condition with waxing and waning.

[127] In Dr. Adrian's opinion:

- a) Mr. Carver suffered from mild mechanical lower back pain prior to the Accident, which was not physically limiting and which was not worsening over time. Dr. Adrian defined mechanical back pain as pain originating from the tissues of the spinal column, being the intervertebral discs, the spinal joints, the spinal muscles, and the ligaments that surround the spine. Dr. Adrian described the natural history of chronic mechanical lower back pain as being one of waxing and waning.
- b) Mr. Carver's leg pain symptoms resemble a spinal nerve root distribution, and they are consistent with symptomatic spinal stenosis. Dr. Adrian described the natural history of symptomatic spinal stenosis as being variable, with some individuals improving, some remaining stable, and some experiencing progression, with progression of symptoms generally being a very gradual process.
- c) Had it not been for the Accident, Mr. Carver would probably have continued to experience a degree of ongoing lower back pain and leg symptoms of a non-physically limiting nature.
- d) It is unlikely that Mr. Carver's pre-Accident symptoms would have spontaneously worsened and become physically limiting had it not been for the Accident.
- e) Mr. Carver's spine was probably vulnerable to injury at the time of the Accident due to his history of lower back pain.

- f) Mr. Carver was at risk of further progress in intensity even without the Accident, and at risk for his symptoms to interfere, at some point, with his ability to perform his household and employment activities at a functional level.
- g) If a chronic mechanical lower back condition worsens, which is uncommon, it occurs in a stepwise fashion, with a period of increased symptoms followed by a plateau and a new stable steady state.
- h) As a result of the Accident, Mr. Carver developed chronic regularly occurring and physically limiting lower back pain symptoms of mechanical lower back pain which spread to his legs.
- i) Mr. Carver is permanently partially disabled due to injuries from the Accident, and his prognosis for further recovery from the lower back injuries is poor.
- j) The Accident materially contributed to Mr. Carver's post-Accident, ongoing and physically limiting mechanical lower back symptoms.
- k) It is unlikely that Mr. Carver's injury to his lower back will deteriorate over time, but his lower back is now vulnerable to future injury as a result of the injuries from the Accident.

[128] Dr. Adrian recommended that Mr. Carver try to optimize his weight, but in Dr. Adrian's opinion, optimizing his weight is unlikely to lead to further healing of his injuries.

[129] Dr. Adrian reviewed the film from the March 2013 MRI test. He thought it showed spinal stenosis, not arachnoiditis.

[130] Dr. Adrian disagreed with Dr. Street's interpretation of the March 18, 2013 MRI report of Mr. Carver's lumbar spine. Dr. Adrian pointed out that the MRI report comments on "clumping" in the introduction, but defers a detailed description to the

body of the report, which comments about pronounced “crowding”. Crowding is associated with spinal stenosis, while clumping is associated with arachnoiditis.

[131] Like Dr. Street, Dr. Adrian reviewed the MRI study itself, and not just the report about it. In Dr. Adrian’s opinion, the MRI itself showed narrowing not clumping, although the degree of crowding is in excess of what one would expect with the degree of degenerative spinal stenosis. Dr. Adrian wrote that epidural lipomatosis (fat within the spinal canal) in addition to degenerative stenosis would explain the degree of crowding. In his opinion, while it is possible that the findings represent arachnoiditis, the imaging findings are not typical of that diagnosis. In any event, the arachnoiditis would relate to leg symptoms, rather than Mr. Carver’s primary problem with lower back pain.

[132] Dr. Adrian wrote:

It is unclear to me how Dr. Street can determine that the injury suffered to Mr. Carver’s lower back has gone on to full healing when there is medical evidence showing that some individuals experiencing injury to the lower back during a motor vehicle accident do not go on to full healing and in Mr. Carver’s situation, he suffered an injury to the lower back in the [A]ccident and his lower back symptoms are more intense ever since the [A]ccident.

[133] Dr. Adrian referred to the radiological finding that Mr. Carver has diffuse idiopathic skeletal hyperostosis (“DISH”) in his thoracic (mid back) spine. In his opinion, the radiologic finding of DISH is an asymptomatic finding in terms of pain for Mr. Carver. Dr. Adrian agrees that the probable stiffening of Mr. Carver’s thoracic spine and concomitant thoracic kyphosis (exaggeration of the normal midback curvature) has probably contributed in part to Mr. Carver’s lumbar lordosis (exaggeration of the normal hollowing of the lower back).

[134] In Dr. Adrian’s opinion, there were no clinical or radiologic findings to suggest Mr. Carver is experiencing lower back pain secondary to osteoporosis.

## **2. Dr. Tarazi, Orthopaedic Surgeon**

[135] Dr. Tarazi is an orthopedic surgeon. He provided a report and testimony at the request of Mr. Carver’s counsel. Dr. Tarazi has been practising orthopedic

surgery for about 17 years, but does not have special training in diagnosis or treatment of spinal injuries.

[136] Dr. Tarazi prepared his opinion on the basis of his assessment of Mr. Carver on August 30, 2016, and review of medical records, but without the benefit of the pre-Accident clinical records of Seafair or Richmond Physiotherapy. He saw those records later, and testified that they did not affect his opinion.

[137] In Dr. Tarazi's opinion, Mr. Carver had relatively mild mechanical low back pain before the Accident. In his opinion, Mr. Carver's leg symptoms were due to spinal stenosis.

[138] In Dr. Tarazi's opinion, the Accident caused a thoracolumbar spine myofascial soft tissue injury, which has likely affected Mr. Carver's muscles, ligaments, and facet joint capsules and resulted in back pain which has radiated into his legs.

[139] In Dr. Tarazi's opinion, Mr. Carver's lumbar spondylosis was significantly aggravated by the Accident. In his opinion, Mr. Carver would likely have experienced some deterioration in his condition even if the Accident had not occurred, but this would likely have occurred "very slowly", and may not have become so symptomatic in his lifetime or may not have reached its present level for at least ten to 15 years. In Dr. Tarazi's opinion, if the Accident had not occurred, Mr. Carver would likely have remained "quite functional until now and for several more years".

### **3. Dr. Street, Orthopaedic Spine Surgeon**

[140] Dr. Street prepared his report and testified at the request of defence counsel. His opinion was based on his examination of Mr. Carver on November 25, 2014, and his review of medical records.

[141] Dr. Street described Mr. Carver as being "severely" disabled. In his opinion, Mr. Carver is disabled from working at his regular job, and it would be a challenge for Mr. Carver to work even part-time because he cannot stand for long and his legs go numb after he sits for more than ten minutes.

[142] In Dr. Street's opinion, before the Accident, Mr. Carver suffered from DISH, spinal stenosis, possible arachnoiditis, facet arthropathy L5S1, and possible osteoporosis. He wrote that Mr. Carver had a "significantly symptomatic pre-existing condition that pre-dated" the Accident. He wrote that DISH, spinal stenosis, and arachnoiditis, in combination with Mr. Carver's morbid obesity and his one and a half pack per day smoking history would have meant that his low back condition had a very poor prognosis absent any accident. Dr. Street wrote that, while the natural history of spinal stenosis in and of itself is good, in the setting of DISH, arachnoiditis, persistent heavy smoking, and morbid obesity, it is very poor.

[143] Dr. Street wrote that Mr. Carver is likely to have ended up in his current clinical state (referring to November 25, 2014), or at least very close to it, absent any accident. He wrote as follows:

While I can accept that Mr. Carver experienced an exacerbation of his pain as a result of the [A]ccident, it is likely that this exacerbation only lasted perhaps four or six months or so. Given that the nature of the post-[A]ccident symptoms are exactly the same as those pre-[A]ccident and given that his pre-[A]ccident condition in and of itself likely had a very poor prognosis, it is my opinion that Mr. Carver's current clinical experience would most likely have been the same in any event absent the [Accident].

It is my opinion that the [A]ccident likely resulted in a soft tissue injury (whiplash-associated disorder, type II) to the muscles around the lower lumbar spine. Mr. Carver's low back was vulnerable and so he likely experienced some increase in pain also from the L5-S1 facet and probably the thoracolumbar junction at that transition area between his DISH and his mobile lumbar spine.

[144] Dr. Street suggested a number of theories about Mr. Carver, which he agreed were possible diagnoses rather than definitive diagnoses. Dr. Street suggested that Mr. Carver may have arachnoiditis. This is an uncommon condition, consisting of inflammation of the nerve roots which causes them to clump together, and which can be a profoundly painful and disabling condition. Dr. Street based his hypothesis of arachnoiditis on the results of the March 2013 MRI image.

[145] Dr. Street wrongly referred to the MRI report as having "numerous" references to "clumping". In fact, the MRI report made only one reference to

clumping. The author of the MRI report thought it indicated spinal stenosis, not arachnoiditis. However, Dr. Street also examined the MRI imaging itself.

[146] Dr. Street acknowledged that trauma, such as from a car accident, can cause arachnoiditis. In the absence of an MRI of Mr. Carver's back prior to the Accident, it is not possible to determine whether, if Mr. Carver has arachnoiditis, he had it prior to the Accident. Dr. Street's theory that Mr. Carver had arachnoiditis at the time of the Accident was based on the fact that Mr. Carver had symptoms in his legs prior to the Accident.

[147] Dr. Street accepts that Mr. Carver has some spinal stenosis, and that it could explain Mr. Carver's leg symptoms.

[148] Mr. Carver has DISH in his thoracic back. DISH is a variant of osteoarthritis. This is a progressive condition, and Mr. Carver's thoracic spine had essentially become fused. Because of the rigid thoracic spine, the transition between Mr. Carver's thoracic spine and his lumbar spine has been placed under extreme pressure, requiring Mr. Carver to compensate by a hyperlordosis of his lower back. Dr. Street suggests that the DISH may be causing pain in Mr. Carver's lower back.

[149] As stated, Dr. Street's written opinion suggested that the exacerbation to Mr. Carver's symptoms lasted only perhaps four to six months from the Accident date of February 28, 2011. In his testimony at trial, Dr. Street agreed that it was challenging to determine when the injuries from the Accident resolved and when Mr. Carver's symptoms became attributable to the conditions which existed prior to the Accident.

[150] In Dr. Street's opinion, Mr. Carver experienced an exacerbation of his pre-Accident symptoms that lasted about four to six months, but in any event, had resolved by November 25, 2014, when Dr. Street examined him, Dr. Street would have expected that Mr. Carver's pre-Accident conditions would have degenerated to the point that he would have the symptoms he had at that date regardless of the Accident.

#### 4. Discussion of Orthopaedic and Physiatric Evidence

[151] Drs. Adrian, Tarazi, and Street are all well-qualified. Drs. Adrian and Street are particularly highly qualified regarding spinal issues. Both are members of the Vancouver Spine Surgery Unit and the Integrated Ambulatory Spine Program at Vancouver Hospital.

[152] I prefer Dr. Adrian's opinion over Dr. Street's for the following reasons:

- a) Dr. Street characterized Mr. Carver as having a "significantly symptomatic pre-existing condition". However, there is no evidence that Mr. Carver's back pain had a significant effect on his function before the Accident. He did not miss any work before the Accident owing to back issues, even though his job required occasional heavy lifting and frequent twisting. While Mr. Carver mentioned taking longer to garden in the summer prior to the Accident, that is not a significant symptom. Further, Mr. Carver had reported improvement from the physiotherapy treatments prior to the Accident.
- b) Dr. Street assumed that Mr. Carver's back pain and leg symptoms were seriously worsening before the Accident. In fact, the records of Seafair and Richmond Physiotherapy suggest otherwise. They suggest that Mr. Carver's condition had worsened and then improved prior to the Accident. This is consistent with mechanical back pain that waxes and wanes over time.
- c) Dr. Street referred to the physiotherapy notes of January 24, 2011 as recording "worrying neurological symptoms in Mr. Carver's lower extremities". This was an apparent reference to the notation "testicular numbness - ? *cauda equina* impingement". There were no further notations in any medical records regarding "*cauda equina* impingement" or neurological symptoms involving Mr. Carver's testicles. Dr. Street agreed that testicular numbness could result from riding a bicycle. I do not accept that this single reference was a finding deserving weight.

- d) Dr. Street referred to a likely diagnosis of arachnoiditis, even though that is an uncommon condition, and can be severely painful. Both Drs. Adrian and Street reviewed the MRI imaging from March 2013. Both observed crowding, but they differ on their interpretation. I prefer Dr. Adrian's interpretation, because it is consistent with the low severity of Mr. Carver's symptoms prior to the Accident, and because of the uncommonness of arachnoiditis.
- e) As stated by Dr. Adrian, there is medical evidence showing that some individuals experiencing injury to the low back during a motor vehicle accident do not go on to full healing. Mr. Carver suffered an injury to his lower back and his lower back pain symptoms have been much more intense ever since the Accident.
- f) Dr. Adrian's opinion is consistent with Dr. Tarazi's opinion.

[153] I conclude as follows:

- a) Before the Accident, Mr. Carver suffered from DISH, which was not symptomatic. He did not have arachnoiditis. He had mildly symptomatic degenerative spinal stenosis, and the symptoms were mild lower back pain, with radiation into his lower legs. If the Accident had not occurred, his pain from the spinal stenosis would likely have waxed and waned. It would not likely have increased over time, but if it had done so, Mr. Carver would not likely have been impaired by spinal stenosis from working or suffered his present level of pain until he was at least 70 years old.
- b) Since the Accident, Mr. Carver has suffered severe lower back pain which has impaired his ability to work and engage in recreational and personal activities.
- c) The Accident caused injury to the tissues of Mr. Carver's spinal column which has result in chronic disabling mechanical lower back pain. As a

result, Mr. Carver is not able to work in any capacity and is significantly impaired in his functioning.

#### **5. Dr. Janke, Psychiatrist**

[154] Dr. Paul Janke, psychiatrist, saw Mr. Carver on February 16, 2016. In Dr. Janke's opinion, Mr. Carver met the criteria for alcohol abuse and nicotine abuse prior to the Accident.

#### **6. Dr. Carlsten, Respiriologist**

[155] Dr. Carlsten is an expert in internal medicine with a specialty in respirology. He evaluated Mr. Carver on March 10, 2016 and reviewed medical records. He provided a written report at the request of the defence but did not testify. He considered Mr. Carver's respiratory symptoms to be less severe than what is often expected, but in the range, for moderate severity COPD.

[156] In Dr. Carlsten's opinion:

- a) Mr. Carver's COPD symptoms would not have prevented him from working as a machinist even in the absence of the Accident. The machinist work was not very demanding from a cardiovascular perspective.
- b) Mr. Carver's COPD would not prevent him from doing jobs suggested by Dr. Quee Newell, which were driving and cashier positions, and would only limit Mr. Carver from quite strenuous work.
- c) Mr. Carver's life expectancy is reduced by five years due to the combined effect of his COPD and obesity. Individually, Dr. Carlsten estimated a three-year reduction for Mr. Carver's COPD, and a four-year reduction for his obesity.

#### **B. Non-Medical Expert Evidence**

[157] Mr. Carver relied on reports from the following non-medical experts:

- a) Mr. Derek Nordin, vocational consultant; and
- b) Mr. Kevin Turnbull, economist.

[158] The defence relied on reports from the following non-medical experts:

- a) Dr. Quee Newell, vocational consultant; and
- b) Mr. Mark Gosling, economist.

[159] I first discuss the vocational evidence, and then refer to the economic evidence.

**1. Mr. Nordin, Vocational Consultant**

[160] Mr. Derek Nordin is a vocational consultant who assessed Mr. Carver on October 4, 2016 at the request of Mr. Carver’s counsel.

[161] In Mr. Nordin’s opinion:

- a) at the time of testing, Mr. Carver was not competitively employable, and is unlikely to return to the workforce;
- b) Mr. Carver would not be able to cope with his pre-injury occupation as a machinist;
- c) given Mr. Carver’s presentation at Mr. Nordin’s office, Mr. Nordin was far from certain that Mr. Carver could cope with even such minimal employment demands as part-time, sedentary employment that offered sufficient postural flexibility; and
- d) in light of his age as well as presentation, Mr. Carver is highly unlikely to secure employment of any kind.

[162] Mr. Nordin assessed Mr. Carver’s overall reading score (vocabulary plus comprehension) at the 96<sup>th</sup> percentile, comparable to an individual with 18.1 years of education. Mr. Nordin wrote that, were Mr. Carver younger, he would recommend re-

training for Mr. Carver, but because Mr. Carver is 62 years old, in Mr. Nordin's opinion, further schooling is not a realistic option.

**2. Dr. Quee Newell, Vocational Consultant**

[163] Dr. Quee Newell performed a vocational assessment of Mr. Carver on February 22, 2016, at the request of defence counsel.

[164] In Dr. Quee Newell's opinion, it was not likely that Mr. Carver could successfully return to work as a machinist, given the demands of that work and the symptoms and limitations he reported.

[165] Dr. Quee Newell wrote that she was "concerned that Mr. Carver's age, appearance, use of a cane, and his laboured breathing will be viewed negatively by prospective employers".

[166] Dr. Quee Newell wrote that Mr. Carver is probably capable of further formal education, but she would not recommend it given his age and the lengthy time away from paid employment.

[167] Dr. Quee Newell suggested Mr. Carver be assisted to secure part-time work in a direct-entry occupation with limited strength demands, which has sitting as the primary posture, but offers sufficient postural flexibility to alternate between sitting, standing, and moving about on a regular basis. She suggested occupations like driver, and selective cashier or store clerk positions. She suggested that Mr. Carver should be provided with professional vocational assistance in an effort to secure work "with an empathetic employer willing to look beyond Mr. Carver's age, appearance and visible disabilities".

[168] Dr. Quee Newell's evidence was that only 5.1% of machinist and machining and tool inspectors in B.C. are older than 65 years, suggesting that most machinists retire at or before the age of 65 years.

**3. Discussion of Vocational Evidence**

[169] If Mr. Carver had not been injured in the Accident, he would likely have continued to work at Optimil as long as he was reasonably able to do so. It was the best job he had ever had. Optimil retains older employees. Mr. Carver's bankruptcy in the 1990s adversely affected his finances. His daughters are young for a man of his age. It is most probable that Mr. Carver would have worked at Optimil as long as he could.

[170] Mr. Carver is not competitively employable for any kind of work. His presentation is adversely affected by his difficulties walking, sitting, standing, and breathing. He is not likely to be hired for even part-time sedentary work.

**4. Mr. Turnbull, Economist**

[171] Mr. Turnbull is an economist who testified at the request of Mr. Carver's counsel.

**5. Mr. Gosling, Economist**

[172] Mr. Gosling is an economist who testified at the request of defence counsel.

**C. Reliability of Mr. Carver's Evidence**

[173] Defence counsel did not challenge Mr. Carver's honesty, but argued that his evidence about the history of his symptoms was not reliable. For example, counsel pointed out that Mr. Carver could not recall whether his single chiropractic appointment was before or after the Accident. The records show that it was prior to the Accident.

[174] Mr. Carver appeared to be an honest witness, but his recollection of what symptoms he suffered when was not entirely reliable. The clinical records provide some assistance in determining that, but they are sparse for the period before the Accident.

**IV. ANALYSIS**

**A. Responsibility for the Accident**

[175] Mr. Carver's Corolla was stopped in the westbound lane closest to the centre line on Francis Road, in Richmond, B.C., in the middle of the block west of No. 2 Road, when his car was struck from the rear by Ms. Or's westbound Jaguar. Ms. Or saw Mr. Carver's stopped vehicle, but she did not stop in time to avoid hitting the Corolla.

[176] Mr. Carver's position is that Ms. Or is entirely responsible for the Accident because she failed to keep a proper lookout and stop behind Mr. Carver's stopped vehicle.

[177] The defendants' position is that Mr. Carver caused the Accident by changing from the right westbound lane of Francis to the lane beside the centre line and then decelerating, when he ought to have known that Ms. Or would be unable to stop. The defendants' position is that Mr. Carver failed to initiate his left turn signal prior to decelerating or at any time while he was in the lane beside the centre line.

[178] There is no evidence supporting the assertion that Mr. Carver's brake lights and turn lights were not working. Mr. Carver thought they were working. No one observed otherwise. There was no evidence that Mr. Carver's brake lights or turn signal were repaired after the Accident. I reject the suggestion that Mr. Carver's brake lights or turn signal or both were broken at the time of the Accident.

[179] Ms. Or testified that the Accident occurred four or five houses from the intersection with No. 2 Road, while Mr. Carver testified it was eight to ten houses away. I accept Mr. Carver's evidence because he is more likely to know where his home is situated in the block. Ms. Or ought to have had time to stop within eight to ten houses from the corner.

[180] I accept Mr. Carver's evidence that he was stopped and that he activated his turn signal in a timely way.

[181] Ms. Or failed to keep a proper lookout. She saw a stopped vehicle in front of her and negligently failed to stop behind it. She is wholly responsible for the Accident and for Mr. Carver's injuries. The defence did not dispute Mr. Or's liability, so I assume both defendants are liable.

**B. Mr. Carver's Likely Condition if the Accident Had Not Occurred**

[182] Mr. Carver's position is that, if the Accident had not occurred, Mr. Carver would likely have been able to work until he was about 67 to 70 years old, and that he would not likely have suffered severe low back pain until he was about 66 to 71 years old.

[183] The position of the defendants is that, if the Accident had not occurred, Mr. Carver likely would have suffered his present level of low back pain within six months of the Accident. The defendants argue that they are liable only for an exacerbation of Mr. Carver's low back pain, which radiated into his legs, lasting about six months. They argue that at some point in 2011, the cause of Mr. Carver's ongoing symptoms was no longer the Accident, but was his progressive and degenerative spinal condition.

[184] The law regarding causation of damages and pre-existing conditions was well-summarized by Madam Justice Fisher in *Chappell v. Loyie*, 2016 BCSC 1722 at paras. 4-13, as follows:

Causation in law

[4] Causation is established where the plaintiff proves on a balance of probabilities that the defendant caused or contributed to his injury. This general "but for" test is set out in *Athey v. Leonati*, [1996] 3 SCR 458 and confirmed in *Resurface Corp. v. Hanke*, 2007 SCC 7. This test does not require scientific precision; causation is a question of fact that may best be answered by applying ordinary common sense: *Snell v. Farrell*, [1990] 2 SCR 311 at 328. Moreover, the plaintiff does not have to establish that the defendant's negligence was the sole cause of the injury. At para. 17 of *Athey*, the court stated:

... There will frequently be a myriad of other background events which were necessary preconditions to the injury occurring. ... As long as a defendant is *part* of the cause of an injury, the defendant is liable, even though his act alone was not enough to create the injury. There is no basis for a

reduction of liability because of the existence of other preconditions: defendants remain liable for all injuries caused or contributed to by their negligence.

[5] Therefore, even where there are other potential non-tortious causes of an injury, such as degenerative changes, the defendant will still be found liable if the plaintiff can prove that the accident caused or contributed to the injury. The contribution must be material, in the sense that there is a substantial connection between the accident and the injury, beyond a *de minimus* range: *Farrant v. Laktin*, 2011 BCCA 336 at paras. 9-11.

[6] In *Blackwater v. Plint*, 2005 SCC 58, McLachlin C.J.C. discussed the difference between causation as the source of the loss and the rules of damage assessment in tort, at para. 78:

... The rules of causation consider generally whether “but for” the defendant’s acts, the plaintiff’s damages would have been incurred on a balance of probabilities. Even though there may be several tortious and non-tortious causes of injury, so long as the defendant’s act is a cause of the plaintiff’s damage, the defendant is fully liable for that damage. The rules of damages then consider what the original position of the plaintiff would have been. The governing principle is that the defendant need not put the plaintiff in a better position than his original position and should not compensate the plaintiff for any damages he would have suffered anyway: *Athey*.

[7] In short, the essential purpose of tort law is to restore the plaintiff to the position he would have enjoyed but for the negligence of the defendants.

[8] It is not permissible to apportion liability between tortious and non-tortious causes, as the plaintiff would not be adequately compensated. However, where there are multiple causes of a plaintiff’s injuries, the key factual question is whether the injuries are divisible or indivisible. Divisible injuries are those that can be separated so that their damages can be assessed independently. Indivisible injuries are those that cannot be separated: *Bradley v. Groves*, 2010 BCCA 361 at para. 20.

[9] If the injury is divisible, a plaintiff can recover from the defendant only the damages attributable to the injury caused or contributed to by that defendant. If the injury is indivisible, a plaintiff can recover from the defendant 100% of the damages attributable to the injury caused or contributed to by that defendant regardless of the contribution to the injury by others: *Athey*, at para. 24; *Bradley; B.P.B. v. M.M.B.*, 2009 BCCA 365 at para. 33; see also *E.D.G. v. Hammer*, 2003 SCC 52 at paras. 29-33.

#### Causation of damage and pre-existing conditions

[10] As the court said in *Blackwater*, a plaintiff is only to be restored to his original position, and not a better position. A defendant is not required to compensate a plaintiff for any debilitating effects arising from a pre-existing condition that the plaintiff would have experienced anyway, and if there is a measureable risk that the pre-existing condition would have detrimentally affected the plaintiff in the future, regardless of the defendant’s negligence, this is to be taken into account in reducing the overall award: *Athey*, at

para. 35; *Moore v. Kyba*, 2012 BCCA 361 at para. 43. In addition, damages caused by other non-tortious causes that occur after the defendant's wrongful act must be taken into account: *Blackwater*, at para. 80. This is referred to as the "crumbling skull" doctrine. It is important to note that any reduction made to take these factors into account does not reduce the damages; it simply awards the damages which the law allows: see *Blackwater*, at para. 84.

[11] In addition, a tortfeasor is liable for a plaintiff's injuries even if the injuries are unexpectedly severe owing to a pre-existing condition. As the court said in *Athey*, at para. 34, the tortfeasor must take the victim as he finds him, and is liable even though the plaintiff's losses are more dramatic than they would be for the average person. This is known as the "thin skull rule".

[12] There has been some confusion in the law with respect to these labels. In *A. (T.W.N.A.) v. Canada (Ministry of Indian Affairs)*, 2003 BCCA 670, the court clarified this at para. 30 by stating that the "simple idea" expressed in *Athey*, was clear and direct and "both latent and active pre-existing conditions must be considered in assessing the plaintiff's original position." At para. 48:

...Whether manifest or not, a weakness inherent in a plaintiff that might realistically cause or contribute to the loss claimed regardless of the tort is relevant to the assessment of damages. It is a contingency that should be accounted for in the award. Moreover, such a contingency does not have to be proven to a certainty. Rather, it should be given weight according to its relative likelihood.

[13] Hypothetical and future events – how the plaintiff's life would have gone without the tortious injury – need not be proven on a balance of probabilities. They are given weight according to their relative likelihood, or the probability of their occurrence. A future or hypothetical possibility is to be taken into account "as long as it is a real and substantial possibility and not mere speculation": *Athey*, at para. 27.

[185] As set out above:

- a) Before the Accident, Mr. Carver had mildly symptomatic degenerative spinal stenosis, and the symptoms were occasional mild lower back pain and radiation into his lower legs. If the Accident had not occurred, his pain from the spinal stenosis would likely have waxed and waned.
- b) Since the Accident, Mr. Carver has suffered severe lower back pain which has impaired his ability to work and engage in recreational and personal activities.
- c) The Accident caused injury to the tissues of Mr. Carver's spinal column which has result in chronic disabling mechanical lower back pain. As a

result, Mr. Carver is not able to work in any capacity and is significantly impaired in his functioning.

- d) If the Accident had not occurred, Mr. Carver's pain from the spinal stenosis likely would not have impaired his ability to work or care for himself or required pain medication until he was at least 70 years old. That is a period of about 14 years after the Accident.

## C. Assessment of Damages

### 1. Non-pecuniary Damages

[186] Mr. Carver's position is that the appropriate range of non-pecuniary damages is \$130,000 to \$150,000. The position of the defence is that an appropriate award is \$50,000 to \$60,000.

[187] Mr. Carver relied on the following cases:

- a) *Kahl v. Jakobsson*, 2006 BCSC 1163, in which Madam Justice Loo awarded \$125,000 (being almost \$147,000 in 2016 dollars) in non-pecuniary damages to a 49-year-old welder who suffered constant low back pain radiating into his legs as a result of an accident, and underwent surgery, but was able to return to work half time;
- b) *McLeod v. Goodman*, 2014 BCSC 839, in which Madam Justice Donegan awarded \$130,000 in non-pecuniary damages to a 43 year old plaintiff who underwent surgery and suffered severe, daily pain throughout her body as a result of an accident; and
- c) *Bellaisac v. Mara*, 2015 BCSC 1247, in which Mr. Justice Funt awarded \$140,000 in non-pecuniary damages to a 29 year old man who suffered low back pain radiating down his legs, had difficulty sitting, walking, standing, and lifting, and suffered depression.

[188] The defence relied on the following cases:

- a) *Corrado v. Mah*, 2006 BCSC 1191, in which Mr. Justice Slade awarded \$37,500 in non-pecuniary damages to a 61-year-old who had a degenerative condition of the spine at the time of the accident. His condition was manifest, but stable and not disabling. Before the accident, there was a risk that the plaintiff's degenerative condition of the spine would one day result in disabling back pain. His damages were assessed initially at \$50,000, but reduced by 25% to \$37,500 due to the risk of progression of his pre-existing osteoarthritis of the spine;
- b) *Rhodes v. Biggar*, 2010 BCSC 762, in which Madam Justice Russell considered an award of \$60,000 for non-pecuniary damages that was reduced by 25% to take into account the plaintiff's original condition, for an award of \$45,000. The injuries caused by the accident were superimposed on the 57-year-old plaintiff's pre-existing neck, back, and shoulder mechanical pain. Before the accident, there was a measurable risk that the plaintiff's pre-existing condition would have detrimentally affected her in the future whether or not she had been in the accident. The accident accelerated and aggravated her difficulties, but her pre-existing condition would likely have interfered with her work and lifestyle even without the accident.
- c) *Yannacopoulos v. Cronk*, 2015 BCSC 1154, in which Madam Justice Ross reduced an assessment of non-pecuniary damages of \$80,000 by 25% to \$60,000 on the basis of the 55-year-old plaintiff's pre-existing degenerative condition. The court found that the accident accelerated a degenerative process that was well established and progressive, and there was a measurable risk that his condition would have become chronic absent the accident.
- d) *Ali v. Rai*, 2015 BCSC 2085, in which Madam Justice Duncan awarded \$60,000 for non-pecuniary damages to a 50-year-old plaintiff. The plaintiff had some degenerative changes and spondylosis in his neck

and low back. The court found that he suffered a chronic back injury and suffered for some months after the accident with headaches and disturbed sleep.

[189] The purpose of an award for non-pecuniary damages is to compensate Mr. Carver for his pain, suffering, and loss of amenities of life. Mr. Carver is entitled to an award to provide solace and to make his life more endurable with the injuries that he lives with.

[190] *Stapley v. Hejslet*, 2006 BCCA 34 at paras. 45-46, leave to appeal ref'd [2006] SCCA No. 100, is often cited regarding non-pecuniary damages and the principles behind them. Those paragraphs are as follows:

[45] ... I think it is instructive to reiterate the underlying purpose of non-pecuniary damages. Much, of course, has been said about this topic. However, given the not-infrequent inclination by lawyers and judges to compare only injuries, the following passage from *Lindal v. Lindal*, *supra*, at 637 is a helpful reminder:

Thus the amount of an award for non-pecuniary damage should not depend alone upon the seriousness of the injury but upon its ability to ameliorate the condition of the victim considering his or her particular situation. It therefore will not follow that in considering what part of the maximum should be awarded the gravity of the injury alone will be determinative. An appreciation of the individual's loss is the key and the "need for solace will not necessarily correlate with the seriousness of the injury" (Cooper-Stephenson and Saunders, *Personal Injury Damages in Canada* (1981), at p. 373). In dealing with an award of this nature it will be impossible to develop a "tariff". An award will vary in each case "to meet the specific circumstances of the individual case" (Thornton at p. 284 of S.C.R.).

[46] The inexhaustive list of common factors cited in *Boyd* that influence an award of non-pecuniary damages includes:

- (a) age of the plaintiff;
- (b) nature of the injury;
- (c) severity and duration of pain;
- (d) disability;
- (e) emotional suffering; and
- (f) loss or impairment of life;

I would add the following factors, although they may arguably be subsumed in the above list:

- (g) impairment of family, marital and social relationships;
- (h) impairment of physical and mental abilities;
- (i) loss of lifestyle; and
- (j) the plaintiff's stoicism (as a factor that should not, generally speaking, penalize the plaintiff: ***Giang v. Clayton***, [2005] B.C.J. No. 163 (QL), 2005 BCCA 54).

[Emphasis in original.]

[191] I would summarize the significant factors regarding Mr. Carver as follows:

- a) Mr. Carver was 56 years old at the time of the Accident, and 62 years old at the time of the trial;
- b) The Accident caused Mr. Carver to suffer injury to the tissues of his spinal column which has resulted in chronic disabling mechanical lower back pain;
- c) Mr. Carver's pain has disabled him from working in any capacity, has reduced his ability to care for himself, and has significantly reduced the quality of his life;
- d) Mr. Carver is completely disabled from working and his walking is impaired;
- e) Mr. Carver has suffered emotionally from the loss of his ability to work and care for himself and from chronic pain;
- f) Mr. Carver's life has been impaired by his loss of function and the presence of pain;
- g) Mr. Carver's injuries have impaired his ability to spend time with his daughters in activities like camping and fishing and watching them play sports, and diminished his pleasure in life because of the loss of such activities and other activities like gardening;

- h) Mr. Carver's ability to walk, sit, stand, and twist have been reduced by the injuries he suffered in the Accident;
- i) Mr. Carver's factors relating to loss of lifestyle are described above, but fortunately have not made it impossible for him to continue to live by himself; and
- j) Mr. Carver has been stoic. He tried for over a year to return to full-time work, and engaged extensively in physiotherapy, exercise therapy, and pool therapy.

[192] If the Accident had not occurred, it is most likely that Mr. Carver would have simply suffered periodic waxing and waning of his lower back pain and radiation into his legs, without progression and without loss of the ability to walk, sit, and stand comfortably or the loss of the ability to work. There was a small risk that his pre-Accident condition might have worsened, but it would not likely have affected his function or resulted in significant pain until he was over 70 years old.

[193] I have taken into account the fact that Mr. Carver suffered pneumonia, with a two month hospitalization in February through April 2015, which was not a result of the Accident.

[194] If Mr. Carver had not suffered back pain prior to the Accident, an appropriate award would have been in the range of \$130,000. Considering that there was a risk his pre-Accident condition might have worsened, a reduction of about 10% is appropriate. Mr. Carver is entitled to an award of \$115,000 for his non-pecuniary damages resulting from the Accident.

## **2. Past Lost Earning Capacity**

[195] Mr. Carver claims \$272,000 (plus interest) for his pre-trial lost earnings. The position of the defence is that Mr. Carver's past wage loss is about \$20,000. The defence position is based on awarding past income loss only to the end of 2011, on

the basis that after that, Mr. Carver's back condition would have been debilitating even if the Accident had not occurred.

[196] I have concluded that, if the Accident had not occurred, Mr. Carver would have been able to work at the time of trial. As a result, the only deduction required in the calculations of Mr. Carver's past lost earning capacity relate to his hospitalization. He required a period of rehabilitation following his hospitalization. It is appropriate to exclude four months in 2015 from the calculations of his lost earning capacity.

[197] Mr. Turnbull, the economist who testified at the request of Mr. Carver's counsel, estimated that if Mr. Carver had continued to work full-time at Optimil up to the date of the trial, Mr. Carver's earnings would have been about \$272,000. That calculation deducted about \$10,000 in respect of Mr. Carver's two-month hospitalization in 2015.

[198] Mr. Gosling, the economist who testified at the request of the defence, estimated about \$245,000 for Mr. Carver's earnings to trial, if he had continued working full-time at Optimil. Taking into account statistics about the probability of unemployment and part-time work, Mr. Gosling estimated about \$214,000.

[199] Both economists made calculations considering Mr. Carver's average earnings in the years prior to the Accident. Mr. Carver's earnings in 2009 and the first part of 2010 were reduced because of the effects of the worldwide recession on Optimil's business. As a result, the averages were lower than what Mr. Carver would likely have earned in the period between the Accident and the trial.

[200] Mr. Turnbull included in his calculations a figure for Mr. Carver's lost benefits. In contrast, Mr. Gosling only took into account the loss of Optimil's contribution to Mr. Carver's RRSP, on the basis that other lost benefits might be better reflected in special damages. Mr. Carver may have altered his conduct as a result of lost benefits, such as deferring dental work. In this case, I prefer to include a figure for Mr. Carver's lost benefits in calculating his past lost earning capacity.

[201] If the Accident had not occurred, Mr. Carver would likely have worked full-time for Optimil until past the trial date. Taking into account a reduction of four months for Mr. Carver's 2015 hospitalization and recovery, a fair assessment of Mr. Carver's past lost earning capacity is \$250,000, plus applicable interest.

### 3. Future Lost Earning Capacity

[202] Mr. Carver claims \$320,000 for lost future earning capacity. The position of the defence is that Mr. Carver is not entitled to an award for future lost earning capacity, on the basis that any future inability to work arises from his pre-existing degenerative condition rather than from his injuries in the Accident.

[203] As discussed, if the Accident had not occurred, Mr. Carver would likely have continued to work at Optimil as long as he was reasonably able to do so. This is most probable in light of his satisfaction with his job, Optimil's satisfaction with him, Optimil's history of employing machinists who are older than 65, and Mr. Carver's financial situation, including his previous bankruptcy and his relatively young daughters.

[204] While Optimil has one 70 year old machinist, and other machinists over the age of 65, not everyone is able to work as long as they might like. It is difficult to determine the age at which Mr. Carver would most likely have retired if the Accident had not occurred.

[205] I accept Dr. Carlsten's opinion concerning Mr. Carver's life expectancy. Taking that into account, it is appropriate to assess Mr. Carver's lost future earning capacity on the basis that he would likely have worked full-time at Optimil until he was 67 years old if the Accident had not occurred.

[206] Mr. Turnbull provided calculations which did not include any contingencies for such risks as unemployment or retirement before the assumed age. Mr. Gosling provided those calculations, and in addition, calculations assuming a reduced life expectancy and taking into account statistical participation and unemployment rates. The difference in the calculation using the different life expectancy is not significant

at the age of 67, but becomes more significant considering greater ages. The figures are significantly reduced using statistical rates for participation and unemployment.

[207] I have used the multiplier of 4.3, which is close to the figure suggested by both economists for age 67 and assuming a normal life expectancy. Mr. Gosling gave the multiplier of 4.148 using a reduced life expectancy, of 2.883 using the statistics for participation and unemployment with normal life expectancy, and 2.785 using the statistics and a reduced life expectancy.

[208] I have used the annual earnings figure of \$68,334 in 2017 dollars. That utilizes Mr. Carver's annual earnings, and so is a little low because of Optimil's reduced work in 2009 and early 2010. It also includes a figure for all benefits.

[209] That results in a figure of about \$294,000 (4.3 times \$68,334).

[210] The court must assess lost future earning capacity. It is not something that can be determined precisely and therefore calculated exactly.

[211] Mr. Carver is entitled to an award of \$300,000 in respect of his lost future earning capacity arising from his injuries in the Accident.

#### **4. Lost Housekeeping and Yard Work Capacity**

[212] Mr. Carver claims \$20,000 for lost housekeeping and yard work capacity.

[213] In *Harnett v. Leischner & ICBC*, 2008 BCSC 1589, Madam Justice Russell awarded Mr. Harnett \$10,000 for past and future lost housekeeping capacity. Mr. Harnett was not as disabled as Mr. Carver, and had returned to the workforce following his Accident.

[214] I discussed lost housekeeping capacity in *Liu v. Bains*, 2015 BCSC 486. In that case, I awarded Ms. Liu \$35,000 for past lost housekeeping capacity, and \$35,000 for lost future housekeeping capacity. The award was upheld by the Court of Appeal in the decision indexed at 2016 BCCA 374.

[215] My decision included the following:

[188] The test for loss of housekeeping and home maintenance capacity was succinctly stated by Blair J. in *Menhinick v. Lobesz*, 2008 BCSC 1285 at para. 55:

... The plaintiff must establish a real and substantial possibility that she will continue in the future to be unable to perform all of her usual and necessary household work, and that the work she will not be able to do will require her to pay someone else to do it, or will require others to do it for her gratuitously.

[189] Damages may be awarded for loss of housekeeping capacity even if the plaintiff has not incurred any actual expenses for hired services: see *Kroeker v. Jansen* (1995), 4 B.C.L.R. (3d) 178 (C.A.) at para. 9, leave to appeal ref'd [1995] SCCA No. 263; *Easton v. Chrunka et al.*, 2006 BCSC 1396 at para. 45; and *Dykeman v. Porohowski*, 2010 BCCA 36 at para. 28.

[190] In *Kroeker*, the majority of the Court of Appeal recognized that damages for past and future loss of housekeeping and home maintenance capacity may be by pecuniary or non-pecuniary damages, and if non-pecuniary, that there was no reason these damages could not be segregated.

...

[193] Mr. Chang argued on Ms. Liu's behalf that a reasonable and conservative estimate would be that 12 hours per week is necessary to maintain the household. Mr. Chang suggested that \$15 per hour was a reasonable market rate for such services. That rate was accepted in *Deo v. Deo*, 2005 BCSC 1788 at para. 15 and *Chamberlain v. Giles*, 2008 BCSC 171 at para. 127. There may have been evidence in those cases about the market rate. Here there was no such evidence.

[194] In *Amini v. Khania*, 2014 BCSC 1671, Burnyeat J. discussed the need for evidence about the cost of housekeeping services. He wrote as follows, after referring to *Deo* and *Chamberlain*:

[78] There was no evidence led on behalf of Mr. Amini in that regard. I cannot be satisfied that it is appropriate to make a finding that \$15 is a reasonable cost for housekeeping services when no evidence was presented and where the only reference to \$15 is to decisions reached in other litigation where there was evidence before the Court as to what was a reasonable sum to be paid for household assistance.

[195] Burnyeat J. made an award as though the loss were the loss of an amenity, rather than on the basis of a calculation using \$15 per hour.

[216] The Court of Appeal reasons for judgment of Madam Justice Neilson, with which the other members of the panel agreed, include the following:

[25] Since the decision in *Kroeker*, it has been well-established in this province that domestic services have value and an injured party may justifiably claim for loss of housekeeping capacity, even if these services are provided gratuitously by family members: *McTavish v. McGillivray*, 2000 BCCA 164 at para. 63.

[26] It lies in the trial judge's discretion whether to address such a claim as part of the non-pecuniary loss or as a segregated pecuniary head of damage. In *McTavish* at paras. 68-69, the Court suggested that treating loss of housekeeping capacity as non-pecuniary loss may be best suited to cases in which the plaintiff is still able to perform household tasks with difficulty or decides they need not be done, while remuneration in pecuniary terms is preferable where family members gratuitously perform the lost services, thereby avoiding necessary replacement costs.

[27] In this context, I am satisfied that it was appropriate for the trial judge to treat Ms. Liu's claim for lost housekeeping capacity independently from her non-pecuniary loss. ...

[28] The appellants are correct that an award for loss of capacity is generally assessed rather than precisely calculated. Where the award is treated as a separate pecuniary claim, however, there is nothing wrong in using labour force information regarding the value of replacement services as guidance in determining the appropriate quantum: *McTavish* at paras. 63, 67-68. What is important is the ultimate reasonableness of the award.

[29] I appreciate that *Kroeker* and, more recently, *Westbroek*, urge caution in assessing awards for loss of housekeeping capacity. I do not, however, understand these decisions to endorse an award that provides less than full compensation for a proven loss. Nor do they mandate a routine reduction of two thirds if a trial award is successfully challenged. Any reduction will be dictated by the facts of the individual case.

[30] I am not persuaded the trial judge was unaware of the need for a cautionary approach. She referred to *Kroeker* and, in my view, took what can reasonably be interpreted as a conservative approach in calculating the award. Although Ms. Liu's unchallenged testimony was that she had spent 21 hours weekly on household duties, the judge used a figure of 12 hours per week. She declined to accept the hourly rate of \$15 proposed by Ms. Liu, and used the lower rate of \$11.15. The award for future loss of capacity was limited to five years, although Ms. Liu was expected to live well into her eighties with no real hope of improvement in her chronic pain.

[31] Moreover, there was clear evidentiary support for the trial judge's award. Prior to the accidents, Ms. Liu was a diminutive woman with tremendous energy and industry. In addition to full-time, and sometimes overtime, work, she performed virtually all the household chores required to care for her family and home. These were extensive but she willingly undertook them because it was important to her to leave her children free to pursue their studies and employment, in the hope they would have a better life than hers.

...

[32] It is clear Ms. Liu is unable to routinely undertake and perform many of the activities routinely required to do household chores. The trial judge recognized these chores may be reduced as the children mature and leave home, but their departure will also leave Ms. Liu without assistance in performing heavier household tasks.

[33] While I agree the trial judge's award is at the high end of the usual range, I note that this Court in *McTavish* approved an award of \$63,970.

While the awards in *Kroeker* and *Westbroek* were significantly lower, the plaintiff in *Kroeker* was not permanently disabled and was expected to recover in three years, and the evidence as to the allocation of household tasks between the spouses in *Westbroek* was lacking.

[34] The appellants have failed to demonstrate a reviewable error in the trial judge's award for loss of housekeeping capacity. I would accordingly dismiss this ground of appeal.

[217] Mr. Carver is no longer able to garden or mow the lawn. I have taken into account his loss of enjoyment of those activities in the assessment of his non-pecuniary losses.

[218] Mr. Carver is no longer able to care for his home as well as he did prior to the Accident. He is able to do laundry, shop for food, and do many home activities, although more slowly. However, he cannot clean his floors or vacuum frequently. Mr. Carver's older daughter provides some unpaid assistance.

[219] There is a real and substantial possibility that Mr. Carver will need to pay someone else to do housework for him, or have someone do it for him gratuitously.

[220] Mr. Carver's claim for lost housekeeping capacity is a modest claim. He is entitled to \$5,000 for that loss.

## 5. Special Damages

[221] Mr. Carver claims \$1,823.01 for special damages, plus interest. This includes his claim for medication following his discharge from hospital in April 2015, and the costs of Gabapentin and Tramadol/ac.

[222] The position of the defence is that Mr. Carver is only entitled to reimbursement for his mileage costs. The defence argued that the costs of Gabapentin and Tramadol/ac arose from his pre-Accident degenerative condition, and were not caused by that Accident.

[223] If the Accident had not occurred, Mr. Carver would not have needed the pain medication included in his claim for special damages.

[224] Mr. Carver is entitled to \$1,823.01 for special damages, plus interest.

## 6. Cost of Future Care

[225] Mr. Carver claims \$10,000 for the cost of future care. The position of the defence is that his future care costs are not the result of the Accident.

[226] I have accepted that Mr. Carver is suffering pain as a result of his injuries in the Accident. In light of Mr. Carver's pre-Accident lower back pain, Mr. Carver may have required pain medication in the future, even if the Accident had not occurred.

[227] Mr. Turnbull provided a future cost multiplier of about 13.5. Mr. Gosling provided a future cost multiplier of about 13, being about a 20% reduction from a normal life expectancy.

[228] Mr. Carver is likely to require about \$560 per year for pain medication. Using the multiplier of 13, reflecting Mr. Carver's reduced life expectancy, the total would be about \$7,300.

[229] Considering in particular the contingency that Mr. Carver might have required pain medication in the future, even if the Accident had not occurred, Mr. Carver is entitled to an award of \$6,000 for the cost of future care.

## 7. Mitigation

[230] The position of the defence is that Mr. Carver failed to mitigate his damages. The defence argued that he failed to pursue recommended treatment, lose weight, stay active, and look for work.

[231] The burden of proof on the issue of mitigation lies with the defence. As stated by Madam Justice Rowles, writing for the majority, in *Graham v. Rogers*, 2001 BCCA 432 at para. 35, leave to appeal ref'd [2002] SCCA No. 467, regarding the principle of mitigation in personal injury cases:

Mitigation goes to limit recovery based on an unreasonable failure of the injured party to take reasonable steps to limit his or her loss. A plaintiff in a personal injury action has a positive duty to mitigate but if a defendant's position is that a plaintiff could reasonably have avoided some part of the loss, the defendant bears the onus of proof on that issue.

[232] This principle has been applied to arguments that a plaintiff has not pursued a course of recommended medical treatment. In *Chiu v. Chiu*, 2002 BCCA 618, Mr. Justice Low wrote as follows, at para. 57:

... the defendant must prove two things: (1) that the plaintiff acted unreasonably in eschewing the recommended treatment, and (2) the extent, if any, to which the plaintiff's damages would have been reduced had he acted reasonably. ...

[233] The court is slow to determine that good faith decisions are unreasonable. As set out in *Paniccia Estate v. Toal*, 2012 ABCA 397 at para. 86:

... the court only lightly reviews the decision of the person injured to try to mitigate his loss. Courts are extremely slow to criticize good-faith decisions by victims of torts about both whether to take steps in mitigation, or which steps, or how much expense or risk to incur in doing so. ...

[234] Mr. Carver participated in many sessions of physiotherapy, gym exercise, and pool exercise. The evidence did not establish either that he unreasonably failed to participate in treatment, or that if he had done so, it would have affected his condition.

[235] Mr. Carver quit drinking alcohol and smoking. Doing either of those things is difficult and requires a strong will. Mr. Carver remains significantly overweight. It is notoriously difficult to lose weight, particularly for someone who, like Mr. Carver, has trouble standing, sitting, and walking.

[236] The defence has failed to establish that Mr. Carver unreasonably failed to take steps to lose weight or stay active. It has also failed to establish that Mr. Carver's condition would be different if he had taken some other steps.

[237] Mr. Carver made a sustained effort to continue working at Optimil and was not able to do so. He is not competitively employable. It is highly unlikely that he could have obtained a job after he stopped working at Optimil, even if he had taken more steps to seek one.

[238] The defence has failed to establish that Mr. Carver's damages should be reduced for failure to mitigate in any way.

**V. SUMMARY**

[239] In summary, Mr. Carver is entitled to the following award:

- a) \$115,000 for his non-pecuniary damages;
- b) \$250,000, plus applicable interest, for past lost earning capacity;
- c) \$300,000 in respect of his lost future earning capacity;
- d) \$5,000 for lost housekeeping capacity;
- e) \$1,823.01 plus applicable interest for special damages; and
- f) \$6,000 for the cost of future care.

[240] Unless the parties wish to make submissions concerning costs, Mr. Carver is entitled to his costs on Scale B, for matters of ordinary difficulty. Because I will be retired as a judge of this court effective August 31, 2017, if the parties wish to make submissions concerning costs, they should apply in ordinary chambers for a hearing before any judge of the court.

“Gray J.”