

COPY

**IN THE MATTER OF AN ARBITRATION PURSUANT TO
SECTION 148.2(1) OF THE REVISED REGULATION (1984) UNDER THE
INSURANCE (MOTOR VEHICLE) ACT, B.C. REG. 44/83 AND THE
PROVISIONS OF THE COMMERCIAL ARBITRATION ACT
R.S.B.C. 1996, CHAPTER 55**

BETWEEN:

**EH, an infant by her Litigation Guardian
Public Guardian Trustee of British Columbia**

CLAIMANT

AND:

THE INSURANCE CORPORATION OF BRITISH COLUMBIA

RESPONDENT

ARBITRATION AWARD

Arbitrator: Donald W. Yule, Q.C.
Dates of Hearing: May 12 and 13, 2009
Location: Vancouver, British Columbia
Date of Award: May 28, 2009

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INTRODUCTION

1. Pursuant to the provisions of s. 148.2(1) of the Revised *Regulation* (1984) under the *Insurance (Motor Vehicle) Act*, R.S.B.C. 1996 c. 231 and the *Commercial Arbitration Act*, R.S.B.C. 1996 c. 55, the parties have submitted for determination the assessment of the quantum of damages attributable to the personal injuries sustained by EH (the "Claimant") arising out a motor vehicle accident that occurred on March 15, 2006 on the Malahat Highway, Vancouver Island, BC (the "Accident").
2. Liability for the Accident has been admitted.
3. It is also admitted that:
 - a) The Claimant was a person insured for the purposes of entitlement to UMP compensation;
 - b) The tortfeasors were "underinsured motorists" for the purposes of entitlement to UMP compensation;
 - c) There is no issue with respect to applicable deductible amounts.
4. No evidence was adduced with respect to the minimal amount claimed as special damages; accordingly no award is made on that account. Because the amount of tax gross up and Public Guardian and Trustee office fees are dependent upon the damages awarded, the determination of compensation under these two categories is deferred. If the parties cannot agree, then these two matters may be referred back for determination. Thus, the issues for determination at this time are the quantum of:
 - A. Non-pecuniary damages;
 - B. Loss of earning capacity;

- C. Cost of care; and
 - D. An in-trust claim with respect to the services of HS.
5. Two witnesses gave evidence at the Hearing, Mrs. HS, and Mr. DN, one of the Claimant's experts. The Claimant herself, now age 13, did not give evidence. The Respondent made no submission regarding this circumstance. Counsel indicated that there were no issues respecting the credibility of either the Claimant or the members of her family, whose support for the Claimant was described as exemplary. I accept as accurate the evidence of HS.
6. Both parties filed expert reports; none of the experts was required to be produced for cross-examination. All the experts were agreed to be qualified to express the opinions contained in their reports. One of the Respondent's expert reports by an orthopedic specialist, Dr. C. [Exhibit 2, Tab 17] was put into evidence by the Claimant.

BACKGROUND CIRCUMSTANCES

Claimant's Personal Circumstances

7. The Claimant was born January 21, 1996. She has two twin brothers born when the Claimant was age 3. Their mother died prior to the Accident. HS had worked for many years with the Provincial Ministry for Child Care Services. Upon retirement she worked on contract for the City of Vancouver Aboriginal Child and Family Services. In that capacity she first became involved with the Claimant and the Claimant's mother when the Claimant was five months' old. HS and her ex-husband Mr. RS took the Claimant and her mother and subsequently the twin boys into their family. HS's sister, Ms. RS was a single woman and high school English teacher. Mr. RS was a retired high school

special education teacher. After the death of the Claimant's mother, HS and Mr. RS became foster parents for the three children, which was their status at the date of the Accident. In September, 2008 they formally adopted the three children.

8. At the time of the Accident the Claimant was in grade 4 at LS Elementary School. She was described by HS as a very motivated student who seldom missed school, loved her teachers, worked hard but struggled to be an average student. The Claimant received considerable assistance at home from HS, Mr. RS, and Ms. RS who provided tutoring in math and english, encouraged reading, and all helped with homework. Prior to the Accident the Claimant was also receiving assistance in social development, one hour per week from a First Nations Co-ordinator.
9. According to HS, prior to the Accident, the Claimant had no health problems. She was very energetic, loved the outdoors, and participated in bicycling, swimming, skating, lots of walking. Her main recreational activity for three years had been soccer, playing in a community league. The Claimant was very athletic and very competitive. She was a fast runner with a graceful running style. She could kick with either left or right foot. She was one of the best runners in her class at school. She was one of the better soccer players on a good team that rarely lost. Mr. RS was a soccer enthusiast and always went to her games.

THE ACCIDENT

10. The Claimant was a left rear seat belted passenger in a 1997 Ford Econoline van travelling on the Malahat Highway on Vancouver Island on March 15, 2006 when the van was struck by an oncoming vehicle that crossed the centre line of the highway. The van careened off the other vehicle and struck a rock wall. The van was severely damaged

and its front end crushed [Exhibit 1, Tab 14 – Police Photographs]. The Claimant's twin, younger brothers, Ms. RS and Mr. RS were also occupants of the van and sustained injuries.

OVERVIEW OF INJURIES AND TREATMENT

Hospitalization – Acute Phase

11. The Claimant was transported by ambulance to Victoria General Hospital. She was then experiencing intense neuropathic pain all over her body. As described by HS, the Claimant could not stand being touched; even contact with bed sheets caused severe pain. A clinical note refers to the pain as "intractable" (Exhibit 1, Tab 3, Page 2). EH was immobilized in a room encased in glass, in bed lying still with sandbags around her, whimpering and moaning. Her right leg was paralyzed. She was assessed by doctors with various specialties and subjected to a number of x-rays, CAT scans and MRIs. She was diagnosed with the following injuries:
 - a) Brown Sequard syndrome C7, T3 (a spinal cord injury);
 - b) Avulsion of the C7 spinous process;
 - c) C7, T1 facet subluxation;
 - d) C-7, T-1 and T-2 compression fractures;
 - e) Avulsion right anterior cruciate ligament and partial tear medial collateral ligament of the right knee;
 - f) Abrasions and contusions throughout her body.

12. On March 17, 2006 the Claimant was transferred by helicopter to BC Children's Hospital. HS was present at Victoria General Hospital to observe the preparation for the transfer which took over an hour.
13. At Children's Hospital the Claimant came under the primary care of Dr. T and Dr. R, both orthopedic specialists. She remained paralyzed from the waist down on the right side and continued to experience neuropathic pain. Following advice from a pain specialist, the Claimant was put on two medications for the neuropathic pain. The pain medications were withdrawn on a tapered basis over three weeks and finally discontinued completely in early May, 2006.
14. At Children's Hospital the Claimant was immobilized in a Minerva neck brace to stabilize her cervical spine. She was required to wear this uncomfortable brace at all times, except when she was lying flat in bed properly encased in sandbags. She continued to wear the Minerva brace until May 15, 2006, (ie. for two months). At Children's Hospital the Claimant was also fitted with an ankle foot orthosis described by HS as a plastic boot for foot drop. She underwent rehabilitation, occupational therapy and physiotherapy in order to relearn how to walk.
15. On March 27, 2006 the Claimant was transferred by ambulance from Children's Hospital to Sunnyhill Health Centre for Children ("Sunnyhill"). The Claimant continued to suffer intense pain in both legs whenever they were moved and could not tolerate being handled due to extreme hypersensitivity. The neuropathic pain slowly decreased and ultimately resolved approximately 20 days post-accident. She was formally discharged from Sunnyhill on May 4, 2006. She commenced to return home for periods of time in mid-April, 2006 as a result of having been exposed to chickenpox by her twin brothers, which required her to be kept in isolation at Sunnyhill.

16. As a result of a complete ACL rupture and a grade II MCL strain of the right knee, the Claimant required a GII extreme knee brace. Although she participated in rehab at Sunnyhill without the knee brace, it was provided to her shortly after her discharge from Sunnyhill. At the time of discharge, her ability to stand without the assistance of a walking aide or hands on support was about 30 seconds [Exhibit 1, Tab 5 General Rehabilitation Physiotherapy Discharge Report, May 2, 2006].
17. Ms. P, Registered Physiotherapist, summarized the Claimant's status at the time of the discharge from Sunnyhill as follows:

"She continues to wear a Minerva brace for spinal cord protection, and demonstrates residual right sided weakness and left sided sensation changes in her lower extremities. She also presents with ligament damage and resulting instability of the right knee for which she has a GII extreme brace."

Home Transition Phase

18. The Claimant was discharged home into the care of her foster parents. They lived in an older, four story home. The Claimant's bedroom was downstairs but until early May the Claimant occupied the guest bedroom on the main floor. Upon returning home the Claimant required use of a walker and a wheelchair. She subsequently discarded the walker in favour crutches.

19. The Claimant returned to school in early May, 2006 in a wheelchair with a full-time, one-on-one attendant for the remainder of the school year. She received physiotherapy sessions at home from Ms. M, a neurophysiotherapist, 3 times a week (one hour sessions), as well as occupational therapy at home from Ms. T. Occupational therapy continued through the summer, 2006. In an Initial Occupational Therapy Report of Ms. T. dated August 18, 2006 [Exhibit 1, Tab 8] Ms. T. reported the Claimant's status as at August, 2006 as follows:

"Current Activities of Daily Living

E[H] is independent in all her personal activities of daily living. She can independently get in/out of the shower and manage the stairs. The shower chair was returned to Macdonald's Pharmacy on August 11, 2006. All other equipment has been returned or discontinued (except for occasional usage of the knee brace). E[H] has been swimming and riding her bicycle regularly. She continues to have difficulty running. She will be unable to return to playing soccer this year and a replacement activity would be beneficial to improve balance, strength and controlled movements such as 'basic gymnastics, swimming, skating, etc.'

Current Physical Status

At the current time E[H] does not take any medications. She does not report any pain symptoms. She is walking without assistive devices. She continues to walk with a

right sided limp and occasionally drags her right foot. Her right knee is still weak. She continues to attend the West Boulevard Physiotherapy Clinic where she is working on right knee strengthening, gait re-education, running, jumping, hopping, etc. E[H] will move to one clinic visit per week on August 21, 2006. The purchase of good quality supportive running shoes is recommended prior to the start of the school year.

E[H] continues to complain of altered sensation on her left side from approximately T-10 to her toes. This has not changed since her accident. (HS) describes observations of generalized stiffness in (EH) in the mornings. She also describes the difficulties (EH) experiences sometimes with falling asleep at night.

Summary

(EH) has experienced a significant disruption in her life following the MVA of March 15, 2006. Through extensive rehabilitation she has made a good recovery but continues to have weakness in her right knee and altered sensation on her left side. She returned to full time school in May, 2006 and will be back at school in September, with no limitations. (EH) continues with physiotherapy for balance, gait, re-education and physical activity training. Requirements for occupational therapy have been minimal."

20. No home modifications were required, except for the installation of a shower bench. During the initial post-discharge period, HS fastidiously followed the medical instruction that the Claimant was to continue to wear the Minerva brace excepting only when she was lying in bed protected by sandbags. Whenever the Claimant was up, an adult, usually HS, was always within reach of her, to prevent a fall. Use of the Minerva brace ended on May 15, 2006. The use of sandbags around the Claimant's head, neck and shoulders was discontinued at the end of June, 2006. In the initial post-discharge period the Claimant required help with dressing, bathing and going to the bathroom, including wiping her. HS slept beside the Claimant in the guest bedroom bed until the Claimant returned to her own room downstairs around the beginning of May, 2006. Even then HS used to check on her 2 to 3 times a night. HS treated the Claimant "like a toddler".

Current Status

21. The Claimant continues to receive physiotherapy treatment once per month. According to HS there is a visible physical difference between the Claimant's legs. The right leg is smaller in the thigh and calf compared to the left. The Claimant walks with a limp all the time. The limp is not going away. The Claimant is not able to control her right foot that well as it tends to drag. When prompted, the Claimant can walk "normally" for about 20 seconds, or until she stops concentrating on her gait. These conditions are worse when the Claimant is tired or exerts herself. The Claimant now runs in a manner described as lumbering or clumsy. Because of her knee injury she cannot crawl, and she sits down, for example, to do gardening rather than kneeling. She has not returned to soccer or any other impact-type sport on medical advice. The Claimant tires more easily when doing activities such as bike riding, hiking, walking. The family used to go on bike rides from their home lasting 40 minutes one way. The Claimant cannot now complete the ride home, involving a long hill up O Street because her right leg is tired and sore. On walks

in PS Park, she cannot run on logs or jump on and off logs as she used to do. At present if she stands for as long as 20 minutes her leg gets sore and she sits down. She uses a stationery bike twice a week for about 20 minutes; participates in gym at school 3 to 4 times per week (subject to medical restrictions) and goes swimming. Dr. R has recommended surgery to repair her right knee ligaments. The surgery should be done before the Claimant is 16 years of age and the current plan is to have the surgery in the summer, 2010.

22. In cross-examination HS agreed that by mid-August, 2006 the Claimant no longer had the neuropathic pain and was "pain free when 'at rest'" although she still had some pain with exertion and physio. The Claimant has not taken pain medication for these injuries since the summer, 2006. The Claimant participated in volleyball at school as a substitute for soccer. She remains a slim, lithe, attractive girl who, for the most part, is happy and has an optimistic personality. There has been no teacher criticism either before or after the Accident of the Claimant's behaviour, attitude or work habits. HS expressed a concern that the complexity of high school level course material may be too much for the Claimant but also agreed that EH is a responsible student who is spirited, charming and independent minded. The Claimant is aware that her right leg is weak but she does not consider it to be a disfigurement. Whilst she tends to be bossy towards her younger brothers, the Claimant is well socialized and makes friends easily. In the house she cleans her own room, makes her own bed, and helps load and unload the dishwasher. Otherwise, she has no set list of chores.

Injuries Alleged in the Claim

23. As a result of the Accident, the Claimant alleges she has sustained the following injuries:
- a) injury to right shoulder;
 - b) bruising to chest, left side of neck and left thoracic area;
 - c) spinal cord contusion and compression;
 - d) injury to left leg;
 - e) injury to right leg, knee and ankle;
 - f) reduced muscle strength in right lower extremity;
 - g) pain in left and right side of body;
 - h) pain on planter side of right foot, causing a limp and a dragging of the right foot;
 - i) disrupted sensation on left side of left leg to toes;
 - j) hypersensitivity;
 - k) sleep disturbance;
 - l) reduced standing tolerance; and
 - m) loss of balance.

Summary of Expert Reports

Dr. CWR, Orthopedic Surgeon

24. Dr. R was one of the Claimant's principal treating specialists. His two reports dated January 25, 2008 and March 12, 2009 [Exhibit 2, Tabs 1 and 2] were filed.

25. In his first report, Dr. R wrote at page 2 as follows:

“As a direct result of this motor vehicle collision, E [H] sustained a Brown Sequard partial cervical spinal cord injury, C7, T1 and T2 compression fractures, C7-T1 facet subluxation and avulsion of the C7 spinous process. She also sustained a right knee anterior tibial spine avulsion injury and, abrasions and contusions of the anterior chest wall. E[H]’s most significant injury was her partial spine cord injury. A Brown Sequard injury represents injury to one half of the spinal cord. Due to the anatomy of the nerve fibers within the spinal cord, Brown Sequard injuries often present with weakness in one leg and a sensory disturbance in the other leg. Arm findings are variable and are related to the location of the injury. E[H] presented with complete loss of motor power in her right leg, and sensory disturbances in her left leg and right arm.”

26. By May 24, 2006 the Claimant’s neurologic status had improved dramatically with almost normal power in her right leg and improved sensation. On May 2, 2007 the Claimant’s right knee was doing very well and was normal to exam. On January 8, 2008 the right knee exam was normal and there were no symptoms related to the knee. A neurologic exam revealed some weakness in the right leg muscles including the muscles around the hip. The Claimant’s gait was abnormal slightly, with a tendency to have a right foot drop. Her running gait was more noticeably abnormal and demonstrated findings consistent with weakness in the leg with a trunk lurch and again a tendency to have a drop foot gait. The Claimant had a residual weakness in her right leg that would be present for the rest of her life as would the abnormal sensation in her left leg.

27. In Dr. R's view the Claimant sustained three significant injuries that could affect her long-term health. The least significant was the anterior tibial spine avulsion injury to the right knee. At the time of his first report Dr. R did not anticipate further treatment but recommended the knee be followed in the long term.
28. The most significant injuries were the spinal cord injury and the vertebral injuries. Dr. R's opinion is that these injuries:

“ . . . will have a significant effect on E[H]'s life. E[H]'s future activities have been altered. She should not participate in activities that put her at significant risk of high energy injury to her neck, including football, rugby, contact hockey and gymnastics. I would also suggest she avoid any activity involving flips. It is likely that E[H] will develop some cervical spine arthritis in her life. That problem may present as cervical disk disease and later in life advanced degenerative arthritis. The onset of arthritis would be associated with cervical pain and restriction of range of motion. It is likely that E[H] will require oral pain medication as her symptoms progress. I think that it is possible that E[H] will require cervical spine surgery in the future. That surgery would involve a short period hospitalization and physiotherapy. After that surgery E[H] may experience a permanent reduction in her cervical range of motion. I think that it is unlikely, as a result of this injury that she would be so disabled that she would be unable to drive or would require support in her home. It is

possible that E[H] would experience a reduction in her ability to work because of the progression of arthritis. A vocational limitation would be most likely if E[H] selects jobs requiring significant physical labour. It is likely that, if E[H] selects a physical vocation, that she will experience significant periods when she is unable to work due to neck pain during her working life, possibly in her 5th and 6th decade. She should be encouraged to do well academically and select a vocation or profession that does not require physical labour.

E[H]'s spinal cord injury has not fully recovered. She has suffered permanent damage to her spinal cord. E[H] is able to walk, with a very slight limp. She is able to run short distances, but she does so slowly, she has a more abnormal gait, and she tires quickly. I think that E[H]'s running gait will prevent her from being a recreational runner, or using running as a useful form of exercise. These are direct effects of her spinal cord injury. E[H]'s permanent spinal cord injury will affect her in the future. She will not be able to function in a manual labour job because of her weakness. She also may have difficulty in any job that required her to walk much of the day. E[H] would do best in a career that allowed her to use her cognitive abilities, rather than her physical ones. It is unlikely that E[H] will be able to participate and enjoy most recreational sports. Although her disability is not readily visible, she would have difficulty with recreational activities such as tennis

and soccer. She would require a cart to golf on an eighteen hole course.

Through E[H]'s life I think it is likely that she will remain independently ambulatory. In some cases, patients experience a worsening of their deficit in motor power as the [sic] get older, typically in the 7th or 8th decade. E[H] may experience some increase in her weakness as she gets older, however, I feel that it is unlikely that she will loose [sic] enough strength that she is unable to walk as a direct result of the spinal cord injury. E[H] would have more difficulty recovering her strength after a major illness or orthopaedic operation. A common procedure, such as a total hip arthroplasty, would be more difficult for E[H] to recover from, than it would a person with normal spinal cord function. I think that it is likely that E[H] will require a walking aid, such as a cane, at an earlier age than she would have without this injury."

29. In his second report, Dr. R addressed questions posed by counsel and added additional comments as follows:

"1. I think that it is likely that E[H] will develop arthritis in her neck in her 6th decade of life that will be symptomatic. If she selects a physically demanding job, the arthritis may occur in her 5th decade of life.

2. E[H] does require surgery in the near future to reconstruct her anterior cruciate ligament. I think that it is possible that she will require surgery for neck arthritis in the future; however, I think that it is likely that she will live her life without requiring surgery to her neck.”
30. The recommended knee surgery would involve a two hour procedure, a one day hospital stay and a six month's rehabilitation following which the Claimant would be able to return to all activities insofar as her right knee was concerned.

Dr. AT, Physical Medicine and Rehabilitation

31. Dr. ATs' two reports dated October 16, 2008 and January 28, 2009 [Exhibit 2, Tabs 3 and 4] were filed. In his first report, based on a clinical examination on October 16, 2008, Dr. AT confirmed the presence of residual findings. The last normal sensory level was T-11 on the left and the last normal motor level was T-12 on the right. The entire right leg was weak, but the strength was anti-gravity and noted as 4/5. The amount of residual strength, both at the right hip and ankle were adequate for simple day-to-day functional activity but not for anything requiring a greater demand. The description of fatiguing, increasing limping and tripping with activity was consistent with the physical strength findings still present. The sensory symptoms were left-sided, consistent with a Brown-Sequard syndrome due to the crossover the sensory nerve fibers within the spinal cord. The reduced sensation in the left leg was mild and should not be bothersome apart from the potential for frostbite if the leg were exposed in cold weather or burns if the leg were put into hot water.

32. With respect to the right leg weakness, Dr. AT wrote as follows:

“E[H]’s right leg weakness is that of an upper motor neuron lesion, implying the spinal cord injury is causing the weakness. Although she would like to normalize her function, there is simply not enough electrical conduction coming down from the brain to the limb to activate the limb to regain normal strength. However, having said that, the leg can still train. She has enough strength in the leg to train this to become stronger than it is. It will never be normal in terms of its strength or size, and there will always be asymmetry between her two legs. She will always have problems with fatigue, weakness and reduced endurance. Her problem with limping will persist and remain an ongoing factor. As a consequence of this E[H] will not be able to partake in recreational activities of a normal nature that require increased demands. She will have to restrict herself to exercises such as cycling, walking and swimming. She will not be able to do any running, racquet sports or other such activities, including ice hockey, ringette, etc, or anything other than a very, very casual basis. She will therefore have to pick specific recreational activities that she enjoys and she is able to do, and this should then carry her through for the long-term future.”

33. With respect to the right knee, Dr. AT considered there was a risk of increased degenerative change over the long term so that it was possible that she would require a knee replacement in her 60's or even 70's.
34. At the time of his first report the Claimant did not require any specific adaptive equipment for her personal care or in the home. In the future, however she would be better served by not moving into a home with too many stairs as she gets older. If she were pregnant or looking after small children and had a lot of stairs to climb up and down, the right leg weakness would limit her mobility, increase her pain and put her at risk of falls and other injuries.
35. With respect to indoor and outdoor household activities, Dr. AT considered that the Claimant should be capable of doing most chores and activities around the house, both presently and in the future. She would, however, have some problems with heavier work around the home and would certainly not be able to do heavy garden work, climbing ladders, scaffoldings, cleaning gutters and other such activities for which she would have to hire others. She would also have to hire others to help inside the home for the general heavier home chores.
36. Dr. AT agreed with an on-going need for monthly visits with a physiotherapist in part because of the difficulty in ensuring children follow through with regular exercise programs. Within a year or two he recommended she have access to a gym and have a trainer to assist in developing an exercise routine which she could then continue on her own. She would also require review of her exercise program approximately four times a year for an additional 2 to 3 years until she was more mature.

37. With respect to future employment, Dr. AT considered the Claimant had limitations in her ability to work. Her activities should be confined to jobs of a sedentary to light nature, so that she should be able to work through to the end of her working career. She would be better served by improving her education and doing work that is more cognitive than physical. Dr. AT agreed with the opinions of Mr. DN in his September 12, 2008 report respecting the Claimant's reduction in access to the unrestricted job market.
38. Although the Claimant seemed to be a well adjusted and balanced child, in her teenage years she might require some counselling either because of derogatory comments of other teens or her own general body image issues.
39. Dr. AT considered that the Claimant's recovery had plateaued. With respect to the future, Dr. AT wrote at page 9 of his first report as follows:

"E[H]'s neck injuries may go on to cause degenerative changes in the neck but it is difficult to know that with any certainty at this time. She clearly did sustain injuries to her lower neck and upper back, which likely did impart trauma and injury to the associated joints and discs, increasing her potential for degenerative change above that of the average population. Such change may ultimately be progressive, which in turn may become symptomatic enough to warrant surgical intervention. There is no way to know whether this will or will not occur, but it is simply a risk that is definitely greater than that of an otherwise uninjured individual. Such changes, if they occur, will only be expected to be symptomatic once she is in her 40s or 50s."

40. In his second report, Dr. AT addressed several questions put to him with respect to the future. Dr. AT reiterated his view that the Claimant had probably reached a plateau in terms of recovery and that the current level of limitations would remain relatively the same. He then stated at pages 1 – 2 as follows:

“What I did not address in my last report was the fact that spinal cord injured patients do not tend to deteriorate decades after the original event. They, unfortunately, have little or no reserve in their capacity and, therefore, the effects of aging are much greater than occur in otherwise healthy individuals. It is not uncommon for patients who were previously ambulatory to require assistance including motorized or power mobility. In other words, there is the possibility that when she is in her 60s or 70s that she will require additional assistance physically and in terms of equipment needs. This situation could be complicated in that the cost of additional home help can be quite high and the cost of power mobility can be substantial.

It is difficult to know when such changes will occur and will depend on how active and functional Ms. [E]H is over her life. It is possible that such changes could even occur when she is in her late 40s or early 50s, but it is more probable than not that they will occur when she is in her 60s or 70s if and when they do occur.”

41. Dr. AT also noted that the Claimant's overall neurologic reserve was less than an otherwise healthy individual such that the effect of any new event such as a stroke, or injury, would be compounded and greater than if she had not been injured in the Accident.

Dr. PC, Orthopedic Surgeon

42. As noted previously, Dr. C was retained to provide an independent assessment to the Respondent. His report [Exhibit 2, Tab 17] was filed by the Claimant. Dr. C's report was based on a document review only; he did not physically assess the Claimant.

43. In his report Dr. C:

- a) Agreed with the recommendations in their entirety in Dr. R's first report;
- b) Agreed with the final diagnosis in this case of Brown Sequard partial spinal cord injury;
- c) Agreed with Dr. R's opinion that the Claimant would likely not function in a job that requires manual labour and agrees with Dr. R's conclusion that the Claimant may have difficulty performing a job that requires a fair bit of walking during the day;
- d) Agreed that the right leg symptoms will unlikely improve;
- e) Agreed with Dr. R's opinion that the Claimant has a permanent problem;
- f) Agreed with DR's report dated September 2, 2008 that the Claimant is unlikely able to qualify for physical activities involved in a "heavy" category;
- g) Agreed with respect to the further treatment recommended by Dr. R [in his first report] and by DR [in her first report];
- h) Agreed entirely with Dr. R's opinion that the Claimant is at risk of developing post-traumatic arthrosis of her cervical spine; agreed with Dr. R's opinion in his first report on page 3, paragraphs 2 and 3 and on page 4 at paragraph 1;

- i) Agreed with DR's functional assessment report dated September 8, 2008 recommending the Claimant will likely be able to pursue occupations which involve some "medium lifting abilities"; agreed with DR's recommendations and future care considerations in her first report.

44. In addition, Dr. C expressed the following opinions:

- a) The Claimant's right leg symptoms will unlikely improve; and
- b) The Claimant sustained a significant spinal cord injury that will likely alter her ability to function for the rest of her life.

Dr. LK, Registered Psychologist

45. Dr. K conducted a neuropsychological assessment on December 16 and 18, 2008. His report [Exhibit 2, Tab 6] dated March 11, 2009 was filed. Dr. K expressed *inter alia* the following findings and opinions:

- a) The Claimant's full scale IQ was 93, placing her in the lower part of the average range;
- b) The Claimant's verbal comprehension score was in the low average range whereas her perceptual reasoning score was just into the above average range. This discrepancy was significant because it indicated weaknesses in the verbal area relative to non-verbal skills and perhaps some mild limitations in working memory and processing speed. The Claimant was relatively weak in tasks that involved abstract or common sense verbal reasoning, indicating she may have some difficulty with theoretical information and verbal problem solving;
- c) It is probable that the Claimant had a mild level of learning disability prior to the Accident;

- d) Except for her ability to do arithmetic calculations, the Claimant's academic skills were very close to mid-average in all areas;
- e) The Claimant does not report any major changes in her personality or behaviour; however during adolescence the Claimant will have a significant disadvantage due to her partial paralysis and muscle atrophy which is likely to have some effect on her social and recreational functioning and consequently affect her self-image and possibly her emotional adjustment; and
- f) The Claimant's physical limitations are likely to have a more significant effect on her career options than for individuals with stronger or even average verbal abilities. It is likely that verbally based occupations will represent only a limited option to her and would likely to be confined to lower level jobs. In a general sense, the Claimant's physical injuries will impede her in areas where she otherwise has her major intellectual strengths.

46. At page 12 of his report, Dr. K sets out his recommendations as follows:

“1. In order to maximize her academic performance and consequently maximize her career options, E[H] should be provided with whatever academic support she requires. Primarily, this will involve one-to-one assistance.

2. E[H], possibly with the help of an occupational consultant, should explore alternative recreational, leisure and avocational pursuits to help her discover and develop skills and abilities that may later be useful in an occupational sense as well.

3. Provision should be made to provide E[H] with psychotherapy when and if she requires it due to the development of adjustment difficulties in her adolescent years. Similarly, she probably will benefit from counselling/psychotherapy had [sic] various stages in her life, including time such as entry into adulthood, relationships and family development.

4. As she enters into her later high school years, E[H] should have a comprehensive vocational assessment and counselling to help her developing a career pathway that accounts for her strengths and weaknesses.

5. E[H] probably will continue to require one-to-one assistance throughout her high school and subsequent post-secondary studies.

6. In order to facilitate career adjustment, I would recommend that E[H] have access to a job coach to help her identify and negotiate any accommodation that is required in her work."

DR, Registered Occupational Therapist

47. DR conducted a functional assessment on August 20, 2008 and prepared a report dated September 2, 2008 [Exhibit 2, Tab 7]. Based on the same assessment, DR also prepared a preliminary outline of future care costs report dated September 18, 2008 [also at Exhibit 2, Tab 7]. She subsequently conducted a further assessment on October 10, 2008 and

prepared a cost of future care assessment report dated March 26, 2009 [Exhibit 1, Tab 8]. Both reports were filed. DR is the only occupational therapist to have assessed the Claimant.

48. At page 9 of the September 2, 2008 report, DR sets out her recommendations, based upon the Claimant's demonstrated physical abilities and a review of the medical information. The recommendations were:

“1. Based on her current physical abilities and anticipated increased physical abilities (that will come with age and increased body weight), I anticipate Miss [E]H will be able to pursue occupations in the future which involve some medium lifting abilities (lower end of medium work category, with medium category defined as ‘rare lifting of 20 – 50 pounds)’, as long as the lifting is performed at or above waist height. She will likely experience difficulty performing lifting tasks below waist height, as these tasks require her to crouch and use her legs for strength.

2. Although she is able to perform limited amounts of crouching and kneeling, these tasks are uncomfortable and result in increased leg symptoms. It is recommended that she avoid occupations that require significant or repeated crouching and/or kneeling; examples include daycare worker and floor/carpet layer.

3. I am recommending that in the future, Miss [E]H avoid occupations that involve significant and/or repeated

cervical neck rotation; examples include heavy equipment operator and occupations that involve significant driving.

4. Occupations that involve working from heights should also be avoided (to minimize risk and further neck injury in the event of a fall); examples include construction and maintenance occupations.

5. Miss [E]H is precluded from occupations which require tasks such as running and balancing; such as police officer and firefighter.

6. Due to concerns regarding gait, decreased walking tolerances and balance issues, Miss [E]H would be not be [sic] suitable to perform occupations that involve substantial standing; examples include waitress, cashier, and meter reader.

Additionally, I am concerned that considering Miss [E]H's ongoing academic challenges combined with her physical restrictions will significantly impact on her occupational future choices."

49. The same report set out future care considerations as follows:

"1. Equipment needs; Equipment needs may include items such as mobility aides, home safety equipment.

2. Potential deterioration of function; aging and/or future illness or surgery could result in a need for services such as home cleaning assistance and yard maintenance.

3. Potential for surgery; if Miss [E]H requires surgery in the future, there will be costs related to post operative care and rehabilitation services.

4. Vocational assistance; as Miss [E]H is limited in her physical abilities and this is combined with limited academic abilities, she may need assistance with establishing a suitable vocational plan and may subsequently require periodic vocational services (when she transitions between jobs)."

50. In her cost of future care assessment report, at page 16, DR makes the following recommendations:

"1. Based on her current physical abilities and anticipated increased physical abilities (that will come with age and increased body weight), and my review of the medical information, I anticipate Miss [E]H will be able to pursue occupations in the future which fall into the light physical demand category). She will likely experience difficulty performing lifting tasks below waist height, as these tasks require her to crouch and use her legs for strength. DN, vocational consultant, recently indicated that

Ms. [E]H will be restricted to work involving 'light' physical demands.

2. Although she is able to perform limited amounts of crouching and kneeling, these tasks are uncomfortable and result in increased leg symptoms. It is recommended that she avoid occupations that require significant or repeated crouching and/or kneeling; examples include daycare worker and floor/carpet layer.

3. I am recommending that in the future Miss [E]H avoid occupations that involve significant and/or repeated cervical neck rotation; examples include heavy equipment operator and occupations that involve significant driving (e.g. delivery driver).

4. Occupations that involve working from heights should also be avoided (to minimize risk of further neck injury in the event of a fall); examples include construction and maintenance occupations.

5. Miss [E]H is precluded from occupations which require tasks such as running and balancing; such as police officer and firefighter.

6. Due to concerns regarding gait, decreased walking tolerances and balance issues, Miss [E]H would be not be [sic] suitable to perform occupations that involve substantial standing; examples include waitress, cashier, and meter reader.

7. I am concerned that considering Miss [E]H's academic limitations combined with her physical restrictions will significantly impact on her occupational future choices. I anticipate that she would require considerable academic support (in the form of tutoring) in order to increase her chances of pursuing a vocational path that does not involve physically oriented occupations."

A Table following the body of this report sets out costing associated with each of the recommendations.

DN, Vocational Consultant

51. DN prepared a vocational assessment report dated September 12, 2008 [Exhibit 2, Tab 9], based upon an interview and testing of the Claimant on August 13, 2008. DN prepared a second report dated April 3, 2009 [Exhibit 2, Tab 10]. In his first report, based on information available and provided to him, DN provided an estimate of the number of occupational positions available to the Claimant prior to the Accident. He used a computer program [the CAVES Program – Computer Assisted Vocational Exploration Systems] to reduce the approximate 27,000 job titles in the National Occupational Classification [NOC] System to approximately 6,000 jobs. He concluded that prior to the Accident the Claimant would have been suitable for only approximately 733 job titles.

DN then prepared a similar profile of the Claimant post-accident, factoring in the restrictions resulting from her injuries. He estimated that approximately 82% of the job titles previously available were eliminated. Both the initial pre-accident and post-injury vocational profiles were prepared on the basis that from an educational point of view the Claimant was capable of completion of studies at a community college level.

52. In his second report, DN calculated pre-accident and post-injury vocational profiles, assuming a lowered educational level. On the assumption that the Claimant's pre-accident and post-injury educational capability was completion of high school only, there was a loss of approximately 85% of available pre-accident job titles.
53. Thus, DN concluded that EH has suffered a significant loss of future employment opportunities, regardless of the extent of her educational capability. DN also expressed the opinion that a possible consequence of the reduction of employment opportunities was an increased likelihood of periods of unemployment over the course of her working life.
54. DN was called as a witness primarily to address specific criticisms of his first report by the Respondent's vocational expert, JH. Thus, DN explained the origin and use of the CAVES Program and illustrated, by way of example to the legal profession, how job classifications from the NOC could be reduced by synthesizing classifications by common characteristics. DN's opinion in another case, based upon similar use of the CAVES Program has been accepted (*Cojocaru v. B.C. Women's Hospital*, 2009 B.C.S.C. 494).
55. DN also explained that the Claimant may be subject to increased periods of unemployment during her working career because, whenever a particular job ended, she would have a substantially smaller pool of replacement jobs available to her.

56. In his report, JH criticized the use of the NOC job classifications citing the following qualification printed in the *NOC Career Handbook* as follows:

“The Career Handbook is intended for career counselling, development and exploration purposes. HRDC [Human Resources Development Canada] neither condones nor recommends the use of this information for other purposes. The profiles presented here are *not appropriate* for other uses such as screening applicants for particular positions or determining insurance benefits. The data *do not* replace the use of criterion referenced testing to establish performance requirements for work as it occurs in the labour market.”

- 57. In his evidence, DN responded by saying that he was not using the NOC classifications for the purposes of considering any particular job or for determining insurance benefits. The NOC and DN in his reports distinguish between occupations and individual job positions of a specific employer.
58. DN also explained the “quite surprising” [to JH] conclusion that the Claimant’s pre-accident vocational profile only qualified her for approximately 733 job titles out of a total of approximately 6,000. This reduction was attributable to the assumptions made, which included *inter alia* maximum 2 years post-secondary education, average aptitude, average involvement with data, people and things, and normal physical abilities but excluding work of a heavy nature.

59. In cross-examination DN agreed that the more education EH is able to obtain, the more employment options will be available to her. He also agreed that lots of household support is very helpful and where there is very significant interest taken by the family, that provides the "best chance" of vocational success.
60. DN agreed that historically, with exceptions, females frequently oriented toward jobs of a less physically demanding nature. He disagreed, however, with the conclusion in JH's report that the Claimant, post-accident would be suitable for occupations such as "technical and related occupations in health, teachers and professors, paralegals, social service workers and other occupations in education and religion".

JH, Vocational Expert

61. JH provided a report dated April 8, 2009 [Exhibit 2, Tab 18] based upon a document review only. He considered that conducting aptitude testing at 13 years of age [as recommended by DR] would not be valid or useful because it was too early. He did not find in DN's report any basis for the assumption of increased periods of unemployment. He questioned the validity of the use of the CAVES Program and the use of the NOC classification system by DN.
62. JH identified the historical tendency of females toward jobs of a less physically demanding nature, particularly in the area of clerical occupations which he considered to be available to the Claimant based on the available medical information. Based on 2005 consensus data he concluded that approximately 50% of females in British Columbia were employed in non-physically demanding sectors.

63. At page 9 of his report, JH stated:

“However, the areas of true loss that would more likely emerge would be those areas frequently pursued by females which may now be out of her reach such as registered nurse, letter carrier, registered nursing assistant, massage therapist, residential care aid, early childhood education, waitress, chambermaid, perhaps some retail sales, and others. Notwithstanding there are many other occupational groups that would be compatible with the identified areas of compromise from a physical perspective such as technical occupations in health, administrative and support positions, secretaries, transcriptionists, teachers and professionals, paralegals, social workers, social service workers, insurance and real estate sales, travel and accommodation, recreation management, event planning, and many clerical and cashier/teller positions.”

64. JH was unable to say, based on available information, whether or not the Claimant would be able to complete a university degree but he would not rule it out.

65. JH agreed:

- a) With Dr. K that appropriate academic support should be provided for the Claimant on an as needed basis;
- b) The Claimant should have help and support from a vocational rehabilitation consultant in finalizing course selections and identifying a career goal in her later years of high school and following graduation; and

- c) With DN that the Claimant will likely suffer a loss of opportunity as a result of her injuries.

66. In conclusion JH wrote:

“At the present time, one can only say that based on the medical information, there will likely be some job areas that will no longer be suitable for [EH]. However, the impact of that loss will be directly related to the type of career path she might be interested in pursuing. Apart from that, it is difficult to make definitive statements in terms of lost opportunity other than for some of the more physically demanding [non-traditional] occupations, which constitute a relatively small percentage of jobs for females in the labour force, or other more main stream occupations (e.g. waitress), that may rely on more prolonged or excessive lower limb demands.”

OVERVIEW OF SUBMISSIONS

Submission of the Claimant

67. The Claimant submits that she has sustained permanent, significant life-altering physical injuries. They will affect all facets of her life including recreational, vocational and domestic activities. Her disabilities include:
- a) a right-sided limp;
 - b) a right leg that is weak and tires easily;

- c) a tendency to drag her right foot;
- d) a right knee that remains weak and unstable;
- e) a clumsy run that can only last for brief periods;
- f) an inability to stand or walk for prolonged periods of time;
- g) lost sensation on her left leg.

All these conditions are permanent, with the exception of the right knee, on which surgery is to be performed - likely in 2010. Moreover, she faces the likelihood of degenerative arthritis in her cervical spine as a result of her cervical fractures. This deterioration will cause pain requiring medication, may require future surgery which may result in loss of mobility.

68. As the Claimant gets older she may experience an increased loss of right leg motor power and will likely require a cane at an earlier age than she otherwise would have. Future deterioration would occur earlier if she were to engage in more physically demanding vocational pursuits or domestic activities. Because the Claimant is currently independent for all activities of daily living, is not in pain and has not required pain medication since approximately August, 2006, is progressing satisfactorily at school, and is generally happy, optimistic and socially well-balanced, there is a danger of seriously underestimating the impact that her injuries will have over the rest of her life. At age 13 the physical demands upon her have not been large. She has not faced the challenge of running a home and household, caring for young children (should she decide to have them) or whatever physical requirements her job may entail. It is clear from the medical evidence that the Claimant will have to face these challenges with the permanent deficits resulting from her right knee, cervical spine and spinal cord injuries.

Submission of the Respondent

69. The Respondent fully accepts that the Claimant suffered serious injuries with permanent resulting disabilities. The Claimant experienced extreme pain initially and both the Accident and the acute treatment phase would have been very frightening for her. Nevertheless, the Respondent submits that the Claimant has made an excellent recovery. Dr. ST in a orthopedic clinical note dated September 13, 2006 [Exhibit 1, Tab 3, page 7] wrote:

“E[H] was seen back in the clinic today and follow up of her neck injury and spinal cord contusion. She has symmetrical power now. She has very little in the way of discomfort. She does still have some residual sensory change on the left side. I would suspect, therefore, that she probably still has some minor strength asymmetry on the right. Her final diagnosis is a Brown-Sequard’s syndrome. The resolution to date has been excellent. I would expect to see continued improvement over the next year.”

70. Further, in a letter dated March 11, 2009 Dr. ST also wrote:

“The prognosis in spinal cord injury is always guarded, especially in the context of severe neuropathic pain. For such a patient to be in minimal pain and to be walking independently six months after injury is indeed ‘excellent’. This description in no way predicts nor guarantees a complete recovery nor does it attempt to minimize the severity of the patient’s initial injuries. In addition, such a

description does not deny the risk of future problems. I hope that this provides contextual meaning to the clinical notes." [Exhibit 2, Tab 5]

71. The Respondent therefore submits that the ongoing consequences of the Claimant's injuries are minor or modest. They are more than mere nuisance. They are a modest, partial disability. This is based on what the Claimant is able to do currently. The "fatigue" that she experiences is fatigue to the right leg, not "exhaustion type" fatigue. The Claimant herself is optimistic, well balanced, has the benefit of a highly supportive family in every respect. The Claimant herself does not seem aware of her slight limp and certainly does not focus on it. There is some prospect that as she grows, her right leg may get stronger. She has the opportunity to train and maintain strength in the leg. With the right knee ligament repair in the next year or so, the right knee should not be much of a problem. Pain will not be much of a factor, at least until much later in life when cervical degeneration likely occurs.
72. With knowledge of her limitations, the Claimant will have the opportunities to make sensible decisions from among ample opportunities to minimize the impact of her acknowledged residual disabilities.

DISCUSSION AND ANALYSIS

73. From an overall point of view I think the Respondent's characterization of the impact of the Claimant's injuries does not adequately take into account their seriousness. No doubt, from a medical point of view, the Claimant's recovery between the Accident in March, 2006 and April, 2006 was "excellent". Her abilities today, given where she was coming from, would no doubt still be regarded from a medical point of view as excellent. While

the Claimant's current disabilities could be described as "modest" in comparison to the impact of complete right leg parathesia which she initially sustained, her current disabilities, in my view, are very serious in comparison to her prospects as an uninjured athletic young woman. The medical and other expert reports in their dispassionate manner indicate real, on-going, practical restrictions on the Claimant's day-to-day activities. A partial list of these restrictions is as follows:

a) **From the Report of Dr. R**

- i) No participation in activities creating significant risk of high energy injury to the neck including football, rugby, contact hockey, gymnastics, or any activity involving flips;
- ii) Avoid jobs requiring significant physical labour;
- iii) She will never be a recreational runner or able to use running as a useful form of exercise;
- iv) She will have difficulty with any job requiring her to walk much of the day;
- v) It is unlikely she will be able to participate and enjoy most recreational sports, including tennis and soccer; and
- vi) She will require a golf cart to play 18 holes of golf.

b) **From the Report of Dr. AT**

- i) She will always have problems with fatigue, weakness and reduced endurance of the right leg;
- ii) She will be unable to partake in recreational activities of a normal nature that require increased demands;
- iii) She will be restricted to exercises such as cycling, walking and swimming;

- iv) She will not be able to do any running, racquet sports or other activities including hockey, ringette or anything other than on a very, very casual basis;
- v) She is exposed to a risk of burns or frostbite from the lack of sensation in her left leg;
- vi) She would be better served by choosing an apartment rather than a townhouse or a home that is a rancher rather than one with many stairs;
- vii) Fatigue, weakness, and pain in the right leg could put her at risk of falls; and
- viii) She will be unable to do heavy garden work, climbing ladders, scaffolding, cleaning gutters and will have problems with heavier work around the home.

c) **From the Report of DR**

- i) She will likely have difficulty performing lifting tasks below waist height;
- ii) She should avoid significant or repeated crouching and/or kneeling (HS has already observed that the Claimant sits rather than kneeling or crouching to do gardening); and
- iii) She is precluded from occupations that require running, balancing, or substantial standing.

All of the foregoing are separate from the additional set of restrictions that may occur later in life with the onset of degenerative cervical changes.

74. While it is true, as the Respondent points out, that pain is not expected to be a significant component of the Claimant's symptoms until later in life, nevertheless the above listed restrictions and constraints are a permanent and substantial impediment to the Claimant's day-to-day activities.

75. I am cognizant of the information recorded by Dr. AT in his first report at pages 13-14 based on his interview with the Claimant. Dr. AT obtained a history that *inter alia* the Claimant was able to:

- a) go shopping to Superstore and walk around for long periods of time;
- b) go shopping to the mall with her friends;
- c) go on a school hiking trip for 90 minutes;
- d) cycle around Stanley Park, albeit with some difficulty;
- e) be as active as she wanted to be; and
- f) join the cross-country team at school doing the exercises with them but not much of the running.

She was not really aware of:

- a) balance problems for most day-to-day activities;
- b) numbness in her left leg on a day-to-day basis; and
- c) any limping unless someone pointed it out to her.

I consider these remarkable circumstances likely to be the result of the adaptability and optimism of youth and not as minimizing the extent of what the Claimant has lost. This level of achievement is a credit to the Claimant and the support of members of her family in doing the best they can with the tragedy that befell them.

GENERAL DAMAGES

76. At age 10 the Claimant sustained serious, multiple injuries in the Accident. The three most serious injuries were:

- a) a Brown-Sequard partial cervical spinal cord injury;
- b) Bony cervical spine injuries including compression fractures at C-7, T-1 and T-2, facet subluxation at C-7 - T-1 and avulsion of the C-7 spinous process; and
- c) an anterior tibial spine avulsion injury in her right knee (anterior cruciate ligament avulsion and grade 2 medial collateral ligament strain).

77. At the outset, her right leg was completely paralyzed. She:

- a) spent 50 days in three different hospitals;
- b) experienced neuropathic pain (excruciating pain to mere touch) for 20 days;
- c) required her neck immobilized in sandbags when in bed;
- d) at all other times wore a Minerva brace for 60 days;
- e) wore an extreme right knee brace for 75 days; and
- f) wore a plastic boot on her right foot for foot drop for approximately 5 weeks.

As of August, 2006, approximately five months post-accident, she:

- a) had received 70 physiotherapy treatments; and
- b) 40 occupational therapy treatments.

The Accident and the acute treatment phase was a wholly frightening experience for a young child. For part of her hospitalization she was in isolation.

78. The Claimant sustained a number of permanent disabilities as follows:

- a) right leg limp;
- b) weakness, fatigue and reduced endurance in the right leg;
- c) loss of sensitivity of the left leg exposing her to the risk of burns or frostbite;

In addition:

- d) she will require surgery to repair ligament damage in the right knee, likely in the summer, 2010 which involves minimal hospitalization but includes six months' recovery time;
- e) she will likely develop cervical spine arthritis in her latter years. This will likely involve pain and restricted range of motion and require oral pain medication;
- f) there is a possibility (but not a probability) that cervical spine surgery will be required; and
- g) she will have reduced resistance and increased recovery time for some types of future illness or operations, such as, for example, a hip replacement. Since spinal cord injured patients tend to deteriorate decades after the original event, and effects of aging are much greater, there is a possible need for additional personal assistance and equipment in later years. The restrictions itemized in paragraph 73 are permanent;
- h) there is a possibility of a right knee replacement surgery in her 60's or 70's.

Submissions of the Parties

79. The Claimant submits that she has suffered significant, permanent life-altering physical injuries and that her symptoms and functionality are likely to deteriorate over time. There is no real dispute regarding the injuries sustained nor the medical prognosis. The Claimant submits the injuries should be assessed at \$200,000.00 and relies in particular on *Lynn v. Pearson* (1997 B.C.J. No. 539 (B.C.S.C.)); *Boyd v. Harris* (2004 B.C.C.A. 146).
80. The Respondent acknowledges that the Claimant suffered severe injuries and has permanent resulting disabilities. The Respondent, however, says that the Claimant has made an excellent recovery, being comparatively pain free after approximately five months, and her on-going partial disabilities, while more than a mere nuisance are minor or modest. Two major components often associated with large damage awards are not present here, namely on-going pain (at least until the later decades of life) and significant emotional problems. The Respondent submits that damages should be assessed at \$100,000.00 and cites *Blow v. MacMillan* (2002 B.C.S.C. 1145); *Ayles v. Talastasin* (1998 B.C.J. No. 796); *Chiu v. Chiu* (2002 B.C.C.A. 618); and *McKinnon v. Allen* (2005 B.C.J. No. 1088).

ANALYSIS and DISCUSSION

81. I have carefully considered all of these authorities. Not unexpectedly, as counsel both advised, there is no other case "on all fours" with the present one. In *Lynn v. Pearson* the Court awarded \$120,000.00 to a 79 year old man (at the date of his accident) who was transformed from an active senior citizen to the role of a shut in. He did sustain a Brown

Sequard-type injury resulting in right arm, right hand and right leg weakness and numbness on the left side of the body. He also sustained a subluxation fracture of the C-5-6 vertebra, cervical development stenosis, and incontinence as a result of surgical misadventure related to injuries sustained in the accident. Prior to the accident Mr. Lynn was heavily involved as housekeeper and personal assistant for his legally blind wife. He had pre-existing degenerative disease in his lower spine and was using a walker prior to the accident. He also sustained confusion, memory loss and disorientation, possibly due to a mild closed head injury sustained in the accident or the lengthy hospitalization. While this case does have the common feature of a Brown-Sequard spinal cord injury, there are very significant differences, including Mr. Lynn's age, his other symptoms (incontinence, confusion, etc.), his transformation from active caregiver to shut-in, and his pre-accident state of health.

82. In *Boyd v. Harris*, the Court of Appeal declined to interfere with a jury award of \$225,000.00 for non-pecuniary damages to a 36 year old man who sustained a fractured neck and permanent spinal cord injury. Mr. Boyd had difficulty with proprioception or the ability to move appropriately in response to stimuli; unusual reactive reflexes in both legs, increased sensitivity in his arms and legs, constant neck and shoulder pain, intermittent shooting pain in his left arm, loss of dexterity in both hands, loss of strength in his left hand, lack of balance, altered gait, lack of co-ordination, asymmetrical muscle tone in his legs, and intermittent tremors in both arms. He was at risk for the development of depression. He had difficulty manipulating and gripping objects. He could not dress himself normally. He lost his balance. He was able to do most things for himself albeit more slowly than before. When he pushed himself too hard he had to rest because of the consequent pain. He was at risk of developing cysts in the spinal cord which would be painful and could lead to surgical intervention. His condition was worsening and his spinal cord was atrophying at the C-5, C-6 level. The principal argument of the Appellant was that the non-pecuniary damage assessment was excessive

because the plaintiff did not suffer a serious head injury, permanent cognitive damage or paralysis. At paragraph 42 the Court of Appeal usefully summarized the task of searching for reasonably comparable cases. The Court said:

“The identification of comparable cases is not a simple task. Each case is unique. The process should be systematic and rational, not conclusionary. We must therefore search for common factors that influence the awards, such as, most obviously, the age of the plaintiff and the nature of the injury. However, comparisons can be made on a more abstract level, as well. The factors to be considered include the relative severity and duration of pain, disability, emotional suffering and loss or impairment of enjoyment of life. The awards in the comparable cases must be adjusted for inflation. . . .”

The Court of Appeal declined to overturn the jury award noting that its assessment was “generous” and “approaches the outer limit of what would be acceptable”.

83. Again I would point out the significant differences between the *Boyd* case and the present one, in particular the presence of constant and intermittent pain, the extent of the day-to-day physical restrictions and the risk of development of depression.
84. With respect to the Respondent's authorities, I do not consider the *Blow* and *Ayles* decisions to be cases of comparable magnitude. *Blow* was an award of \$50,000.00 with respect to multiple injuries sustained by a 7 year old boy. However, eight months post-accident he was generally trouble free, except for three facial scars and continuing right ankle complaints. The residual right ankle complaints were likely to limit him minimally

respecting recreation, other physical activities and types of work and the prognosis was they should resolve over time. The *Ayles* decision involved an assessment of \$85,000.00 to a 9 year old boy who sustained multiple fractures of the lumbar spine which healed within six months leaving occasional residual low back pain. He experienced migraine headaches after the accident which were attributable to the accident with some discount for the prospect that they would have occurred later in life in any event and the symptoms could possibly be controlled by medication.

85. In the *Chiu* decision there was an award of \$100,000.00 to a 16 year old boy who suffered spinal and head injuries. There was a T-8 compression fracture which caused a spinal deformity resulting in a permanent disability from heavy physical labour and the likelihood of future degenerative changes at the fracture site. The plaintiff sustained a mild traumatic brain injury with a poor long term prognosis and cognitive deficits that were likely permanent. The cognitive symptoms included poor memory and concentration, depression, lowered frustration tolerance, sleep dysfunction, loss of social intercourse, and problems with following directions, processing information, and performing more than one task at the same time.
86. In the *McKinnon* decision a 17 year old female was awarded \$125,000.00 for a mild traumatic brain injury and soft tissue injuries resulting in neck and back pain. The Court concluded that the plaintiff was transformed from a vivacious and lively personality to a reclusive, aggressive, somewhat foul-mouthed individual who cared little for her appearance. She was left emotionally unstable with a diminished ability to cope with life and further her education.
87. I consider the Claimant's loss to be greater than that sustained in the *Chiu* and *McKinnon* cases, having in mind the Claimant's initial complete right leg paraplegia, the extreme neuropathic pain which lasted for 20 days, the significant permanent restrictions resulting

from the weakness, fatigue and decreased endurance of the right leg, the impending surgical repair of right knee ligament damage and the early onset of symptomatic degenerative cervical arthritis. I assess general damages at \$140,000.00.

LOSS OF EARNING CAPACITY

Legal Principles

88. The parties do not dispute the applicable legal principles. They are set out in the various authorities cited by the Claimant including *Spehar v. Beazley* (2002) B.C.J. No. 1718; affirmed (2004) B.C.J. No. 1044 (C.A.); *Reilly v. Lynn* (2003 B.C.C.A. 49); *Rosvold v. Dunlop* (2001 B.C.C.A. 1); and *Kwei v. Boisclair* (1991) 60 B.C.L.R. (2d) 393 (C.A.) and *Brown v. Golaiy* (1985) 26 B.C.L.R. (3d) 353 (S.C.). I have reviewed these cases and do not intend to repeat the passages cited by counsel. A good summary, however, is contained in the *Rosvold* decision at paragraphs 8 – 10 as follows:

“8. The most basic of those principles is that a plaintiff is entitled to be put into the position he would have been in but for the accident so far as money can do that. An award for loss of earning capacity is based on the recognition that a plaintiff's capacity to earn income is an asset which has been taken away: *Andrews v. Grand & Toy Alberta Ltd.* [citation omitted]; *Parypa v. Wickware* [citation omitted]. Where a plaintiff's permanent injury limits him in his capacity to perform certain activities and consequently impairs his income earning capacity, he is entitled to compensation. What is being compensated is not lost

projected future earnings but the loss or impairment of earning capacity as a capital asset. In some cases, projections from past earnings may be a useful factor to consider in valuing the loss but past earnings are not the only factor to consider.

9. Because damage awards are made as lump sums, an award for loss of future earning capacity must deal to some extent with the unknowable. The standard of proof to be applied when evaluating hypothetical events that may affect an award is simple probability, not the balance of probabilities: *Athey v. Leonati* [citation omitted]. Possibilities and probabilities, chances, opportunities, and risks must all be considered, so long as they are a real and substantial possibility and not mere speculation. These possibilities are to be given weight according to the percentage chance they would have happened or will happen.

10. The trial judge's task is to assess the loss on a judgmental basis, taking into consideration all the relevant factors arising from the evidence: *Mazzuca v. Alexakis* [citation omitted]. Guidance as to what factors may be relevant can be found in *Parypa, supra*, *Kwei, supra*, and *Brown, supra*. They include:

1. whether the plaintiff has been rendered less capable overall from earning income from all types of employment;
2. whether the plaintiff is less marketable or attractive as an employee to potential employers;
3. whether the plaintiff has lost the ability to take advantage of all job opportunities which might otherwise have been open to him, had he not been injured; and
4. whether the plaintiff is less valuable to himself as a person capable of earning income in a competitive labour market.”

89. With respect to principles, the Claimant emphasizes the danger of under compensation and the overriding direction from the trilogy that an injured person is to be restored to the position she would have been in, had the accident not occurred, insofar as this can be done with money. The Respondent emphasizes that the assessment is an assessment, and not a mathematical calculation, and this is particularly so where the Claimant is a young person without any established work pattern or even expressed intention or assessed aptitude for any particular occupation.

The Claimant's Submission

90. The Claimant submits that the spectrum of jobs available to her is very narrow. She relies upon DN's evidence that she is now foreclosed because of her injuries from 82% to 85% of the pre-accident, previously available job titles. The broad range of jobs no longer available is consistent with the unchallenged medical evidence respecting the

increased fatigue and reduced strength and stamina of her right leg, the reduced standing and walking tolerance, the problem with gait and balance, the restriction in lifting from below the waist and the early onset of symptomatic degenerative cervical changes in later years. Moreover, the Claimant was and remains an average student who worked very hard with a lot of assistance from interested family members with educational qualifications to achieve average marks. The Claimant submits that she would have attended college and obtained a diploma but for the Accident. It is nevertheless clear from her past performance and Dr. LK's assessment, including the Claimant's overall low end of average IQ, that she has limited capacity to follow the recommendation of Dr. R and Dr. AT and pursue a career that is more cognitive than physical.

91. The Claimant submits that she has extremely limited residual employability. She is precluded from the jobs typically obtained by teenagers and students in fast food outlets or other restaurants as waitress. She is at risk of not being able to work past the age of 55. The Claimant relies upon the report of an economist, DB [Exhibit 2, Tab 16] in which he provided an estimate of the life time earnings to age 65 of the average BC female with a college diploma. This is a measure of the Claimant's earning capacity absent the Accident.
92. The estimated present value of that future employment income is \$607,218.00. The equivalent figures to age 60 and 55 are: \$592,778.00 and \$554,639.00 respectively.
93. The Claimant submits that an appropriate estimate of her future loss of earning capacity is \$450,000.00, a roughly 75% reduction from her pre-accident earning potential derived from DB's estimate. The Claimant refers to four cases in support of her evaluation. In *Stone v. Ellerman* (2007 B.C.S.C. 969) the Court awarded \$500,000.00 to a 19 year old female who was a high school graduate but not academically inclined and had worked as a sales associate and waitress prior to the Accident. She sustained soft tissue injuries

around the right sacroiliac joint culminating in pelvic misalignment and causing very serious pain. At paragraphs 40 – 43, the Court found that the injuries struck at the heart of what the plaintiff – a non-academic – had to offer any employer, namely energy, drive, good health and physical stamina. The pain and suffering that persisted was of a high order, had plateaued and if it improved at all would do so only at a glacial pace. The prospect for improvement in the lower body injuries was bleak. Accordingly the context in which damages were to be assessed was that of a young person who was not academically inclined; had not settled into a career at the date of the accident, had earned \$1,200.00 per month after graduating from high school until the date of the accident, had been in good health; had demonstrated great drive and energy; had worked since the accident in spite of pain earning \$1,500.00 per month; who qualified post-accident to work as a hairdresser but concluded that steady employment as a hairdresser would likely be too much for her and faced chronic pain that was debilitating and likely to carve down and ultimately destroy her ability to work through pain. The Court had before it evidence [not disclosed] of a consulting economist but did not rely upon it on the basis that because of the necessary assumptions, it could only give the appearance of calculation and certainty.

94. In an Ontario case *Hartwick v. Simser* (2004 Carswell Ont. 4324 (Ont. Superior Ct. of Justice)), the Court assessed the “without accident” future income of an 11 year old girl at \$762,928.00 and reduced the amount by 50% to reflect the fact that the plaintiff would be capable of part-time employment and, accordingly, awarded the sum of \$381,464.00 representing one-half of the life time earnings of a female, 3 year college graduate. At paragraphs 312 and 314 the Court stated:

“Dr. Scherer’s testimony does, however, persuade me that a very real and substantial possibility exists that the effect of Krista’s pre and post-accident impairments will prevent her

from having the stamina to combine vocational, family and recreational pursuits. The best measure of her loss is likely the difference between the earnings of a college graduate employed on a full-time basis and those which flow from part-time employment Based on the findings in Krista's case, there is a very real and substantial possibility that Krista will only be able to devote 50% of her energies to her vocation following graduation from college and will therefore suffer a loss of approximately \$381,464.00 representing one-half of the lifetime earnings of a female, 3 year college graduate."

95. In *Chu v. Jacobs* ((1996) B.C.D. Civ. 3389-29), the Court awarded \$125,000.00 to a 15 year old female plaintiff. Her most serious injury was to her left foot which resulted in difficulty walking and standing and an inability to run beyond a very short distance. The plaintiff, however, was an academic high achiever, having been on the honour roll in both grades 8 and 9 and receiving an award for scholastic excellence. The Court noted that because of her injuries, she was not suited for any heavy labouring job. It was probably unlikely that she would ever have pursued such an occupation, given her gender and very slight physical build. The defendant argued that there would be no significant change of career choice as a result of the accident because it was always likely that the plaintiff would have undertaken a sedentary, less physical job. The defendant argued that unlike other individuals whose injuries robbed them of their greatest asset – a strong physique – the plaintiff had been left with her greatest asset – her intelligence – and her injuries ought to have little impact on her loss of earning capacity. The Court rejected that characterization of the effect of the plaintiff's injuries concluding that she would very likely suffer a delayed entry into the work force and her residual disabilities would very likely make her a less attractive and less competitive employee.

96. Finally, in *Hesketh v. Lowe* ((1994) B.C.J. No. 1300), the Court awarded \$150,000.00 to a 15 year old girl who sustained a fractured right femur and was left with a permanent leg length discrepancy. The Court relied upon a report from the Vocational Consulting Group Inc. [the same firm at which the expert, DR in this case works] to the effect that the plaintiff had lost approximately 50% of the occupational options previously available to her. The vast majority of lighter, semi-skilled or unskilled occupations which were in the sales or service industry were foreclosed to the plaintiff. At paragraphs 39 and 40, the Court stated:

“The plaintiff has been precluded, as the vocational report says, from 56% of various occupations that she might have been able to participate in. As Mr. Carlin notes, the plaintiff has experienced on going leg, hip and low back pain as a result of the accident and this pain is exacerbated by prolonged standing, sitting, lifting and stooping, bending or crouching. It is his opinion, which I accept, that if the plaintiff is limited to light work then she will experience a significant loss of opportunity in the work force. Where before she had a choice to pursue post secondary education, vocational training following high school or to directly enter the work force, these options are no longer available to her.

Mr. Carlin notes that, from a vocational rehabilitation point of view, he believes that the plaintiff must pursue post secondary vocational training as a means of gaining access to those lighter types of occupation which will not further

exacerbate her right hip, leg and back pain over the long term.”

97. The plaintiff's pre-accident plan was to become a physical education teacher, a choice no longer appropriate because of her injuries. Because of her difficulty sitting, she left school during grade 12 and took it by correspondence which she was still doing at the date of trial. She was not sure what she wished to do. The Court concluded that but for the accident, the plaintiff would have gone on to complete her grade 12 in the normal way and might very well have been successful pursuing a career as a physical education teacher. The Court found that the plaintiff's delay in entry into the work force was on the order of 4 to 5 years. There was evidence that a delay of 3 years into the work force would result in a loss of just over \$100,000.00.

The Respondent's Submission

98. The Respondent submits that all that can be reasonably predicted is that the Claimant will not be symptom free and will most likely be minimally compromised in the sense that some jobs will not be open to her. The Respondent stresses that there is no head injury [the Claimant's intellectual capacity has not been interfered with]; there is no psychological injury and there is no on-going pain. The restriction in employability all stems from a "mild limb injury". The Claimant missed only about 2 months of school; got her year, and has proceeded equally well, as an average student, in subsequent years. The Claimant is described as optimistic, hard working, responsible, well liked and well socialized with exemplary support from family members which the Claimant's witness, DN, agreed gave the "best chance" of succeeding. The Claimant has almost an entire lifetime to "mitigate" the consequences of the Accident in the sense of making sensible life and career choices.

99. Relying upon the opinion of JH, the Respondent submits that, whilst there are some jobs that the Claimant cannot do, there remain a wide variety of vocational options, including many options that females have historically pursued. The "best outcome" for the Claimant is that she will not in fact sustain any income loss at all compared to what she would have earned in the absence of the Accident. The Respondent suggests that an appropriate assessment is \$150,000.00.

DISCUSSION AND ANALYSIS

100. I find, and it is not really disputed, that the Claimant has sustained a loss of earning capacity as she meets all of the factors in *Brown, supra*.
101. I find that the Claimant is no longer suited for some 80 % or more of the job titles for which she would have been suited but for the accident. I do not accept the Claimant's implied proposition that being foreclosed from 80% or more of otherwise available job titles translates into a loss of earning capacity of 75% or so of the average life time earnings of an average B.C. female with a college diploma. That approach violates the prohibition against mathematical calculations and does not take into account the fact that there remain numerous job titles for which the Claimant remains suited, including many that females have historically entered.
102. Much discussion ensued during submissions with respect to the ability of the Claimant to work as a cashier or teller or similar positions and whether employees in those positions are permitted to sit on a stool. I understand that on DN's analysis, the Claimant would be excluded from such occupations because under the NOC classification, such occupations would include a component of prolonged standing. Common experience

suggests that some employers permit some employees in these positions to use a stool. I accept DN's evidence however that an employer is more likely to provide such an accommodation to an existing employee who is subsequently injured rather than to a job applicant who requires accommodations because of a pre-existing restriction. Regardless, the Claimant is disadvantaged because she has a physical need to avoid prolonged standing whereas for other employees without physical impairment the use of a stool may be a matter of comfort and convenience.

103. I have the following comments respecting the cases relied on by the Claimant. I do not think the approach of the Court in *Hartwick, supra* of assessing the difference between full time and part time earnings is applicable here. (Dr. AT says the opposite [Exhibit 2, Tab 3, p. 8, para. 3] The evidence does not suggest that the Claimant will only be able to work part time; her primary loss of capacity arises from the restricted number of occupations available to her. I find it difficult to discern the basis of the very substantial assessment of Stewart J. in *Stone, supra* although paragraph 43 suggests that the debilitating chronic pain would ultimately destroy the Claimant's ability to work through her pain, as she had been doing up to the trial; accordingly the assessment may reflect a not articulated period of years during which the Claimant would be unemployable. It is not suggested that the Claimant in this case will be unemployable on account of her injuries, subject to the possible impact of early degenerative cervical arthritis in her latter years. The *Chu, supra*, case is instructive. The plaintiff was 15 years of age with a pre-accident interest in pursuing a career in the tourism industry. As a result of her injuries she was not suited for any heavy labouring job and was unable to stand or walk for prolonged periods. She was however an academic high achiever and was going to obtain a university degree. Although the court rejected the defendant's submission that there would be no significant change of career choice because the plaintiff would always have undertaken a sedentary less physical job, the award of \$125,000.00 in the light of other factors taken into consideration suggests only a modest assessment for the loss of

opportunity to pursue foreclosed occupations. There was a high chance that the plaintiff would undergo future surgery on her foot, and the present value of the associated six months' loss of earnings was over \$20,000.00. The present value of an annual loss of a \$1,000.00 for lost overtime, delayed promotions or missed job opportunities was almost \$25,000.00. The plaintiff was very likely to suffer a delayed entry into the work force with an accompanying unquantified income loss.

104. In *Hesketh, supra* the 15 year old plaintiff whose pre-accident plan to be a physical education teacher was thwarted by her injuries was unsure what she wanted to do by the time of trial. She was limited to jobs involving light work and that did not require prolonged standing or sitting, lifting, stooping, bending or crouching. She was struggling to complete Grade 12. She was precluded from 56% of occupations available to her pre-accident. There was evidence that a delay of three years in entering the workforce resulted in a projected loss of just over \$100,000.00. The court found that the plaintiff's delay in entering into the workforce was more on the order of four to five years. This result suggests to me that the foreclosing of a substantial of job opportunities does not necessarily result in a substantial loss of earning capacity.
105. The Claimant, unlike the plaintiff *Chu*, does not have high academic ability to fall back on. The Claimant here is foreclosed from significantly more occupations than *Hesketh*. The foreclosing of a high percentage of previously available occupations is a factor to be taken into account in assessing loss of earning capacity. In addition there is a real and substantial possibility that the Claimant will not earn the same or any income as she might have from part time jobs as a teenage or whilst a student. I accept DN's evidence that the Claimant is at risk of having longer periods of unemployment over working career because on a job termination for any reason she will have fewer options. I find there is a real and substantial possibility that the Claimant at the end of her working

career may not be able to work as long or as much as she otherwise would have, on account of the onset of symptomatic cervical degeneration.

106. Taken all of the foregoing factors into account I assess the loss of earning capacity at **\$250,000.00.**

COST OF FUTURE CARE

Legal Principles

107. There is no dispute between the parties regarding the legal test for establishing a claim for cost of future care. The test was set out by McLachlin J., as she then was, in *Milina v. Bartsch* (1985) BCJ No. 2762 at paragraphs 198 and 199 as follows:

“The test for determining the appropriate award under the heading of cost of future care it may be inferred is an objective one based on medical evidence.

These authorities established (1) that there must be a medical justification for claims for cost of future care; and (2) that the claims must be reasonable.”

Because the cost of care claim deals with future events, I note that the standard of proof to be applied is simple probability, and not the balance of probability. Thus possibilities and probabilities, chances, opportunities and risks must all be assessed, so long as they are a real and substantial possibility and not mere speculation. These possibilities are to be given weight according to the percentage chance that they would have happened or

will happen. *Rosvold supra*; *Steenblok v. Funk* (1990) 46 BCLR (2nd) 133 (CA @ para. 6).

108. With respect to principles, the Claimant emphasizes the following points:

- a) the primary emphasis in assessing damages for a serious injury is provision of adequate future care (*Milina, supra*, at paragraph 184);
- b) there should be "full" compensation for pecuniary loss in cases of severe injury (the trilogy);
- c) with respect to the requirement of "medical justification", it is not necessary that a medical doctor give evidence about or confirm the justification for cost of care items. A rehabilitation consultant may provide the expert evidence required (*Jacobsen v. Nike Canada Ltd.* (1996) BCJ No. 363 (Levine, J.); *Frers v. DeMoulin* (2002) BCSC 408);
- d) in this case DR, an occupational therapist, is the only expert who carried out a functional assessment and cost of care assessment of the Claimant. DR was not required to be produced for cross examination. It was agreed all the experts that were qualified to give the opinions in their reports. There was no contrary cost of care expert report filed by the Respondent. Accordingly it is not open to the Defendant to object that DR's recommendations are unreasonable, because that is a matter for which expert evidence is required;
- e) the defence expert Dr. C in his report filed by the Claimant agrees with all of DR's recommendations and future care considerations in her first report [Exhibit 2, Tab 7, pgs. 9 and 10].

109. The Respondent submits that future care costs must be reasonable and that the claim should be assessed conservatively. The greatest reliance should be placed upon the opinions of Dr. R and Dr. AT.

DISCUSSION and ANALYSIS

110. Given the evidence of Dr. C, and in the absence of any expert report on behalf of the Respondent challenging the recommendations of DR, I agree with the Claimant's submission that it is not open for the Respondent to argue that the cost of care items claimed are "unreasonable, unnecessary and excessive". On the other hand, I do not think it follows that the Claimant is simply entitled to the full amount of the costs of future care tabulated by DR and for which a present value was determined by DB in his report [Exhibit 2, Tab 13, p. 5, Table 2] in the total amount of \$367,647.00. The reason is that DR's table of future care items and costs [Exhibit 2, Tab 8] includes an allowance for every item or service that she or one of the medical experts has indicated the Claimant "may" require. However, these possibilities are to be given weight according to the likelihood they will happen (*Rosvold, supra*, at para. 9) even where the expert evidence has not addressed the likelihood of the future event occurring, other than to say it is a risk.

I now turn to discuss the individual items and services claimed:

Vocational/Educational Services

111. Dr. R, Dr. AT and Dr. KR are unanimous that the Claimant should be encouraged and supported to do as well as she possibly can academically in order to enhance her career choices. The Respondent agrees it is reasonable for the Claimant to receive timely advice in respect of her educational path and career choice and to have some "very modest" award for tutoring. The claim as presented totals approximately \$80,000.00 consisting of five separate components namely:

- a) two educational / aptitude tests, one immediately and a second in Grade 10 or 11 to guide the Claimant to realistic and obtainable vocations. This item is costed at \$3,500.00 (averaged);
- b) one on one tutoring through to the end of high school, 5 hours per week, costed at \$47,800.00;
- c) tutoring through two years of college at 5 hours per week costed at \$15,200.00;
- d) two periods of vocational support services as an adult during career/job transitions, costed at \$8,000.00;
- e) two episodes of job coaching as an adult over a six month period, costed at \$5,000.00 (averaged).

112. Although DR suggests repeat educational/ aptitude testing prior to completion of high school, Dr. AT only recommends providing assistance in identifying a suitable career prior to completion of high school, and JH disagrees with aptitude testing at age 13 on the basis that it is too early and would not yield a valid result. I award an allowance for a one time educational/ aptitude testing.

113. With respect to the claim for tutoring, Dr. K recommended the Claimant be provided with whatever academic support she requires and added that she would "probably" continue to require one-to-one assistance throughout her high school and subsequent post-secondary studies. DR has recommended five hours per week. Given the existing support that the Claimant receives from educationally qualified family members, which significantly was being provided even before the accident, I have some doubt whether at least at the current stage of her schooling, the Claimant will actually engage an outside tutorial service provider. Nevertheless, given the particular importance now to the Claimant's educational advancement in light of her physical restrictions, and because the circumstances of supporting family members may change, and because family members ought not to be put in a position of being obligated to provide support services, and

because there is no evidence indicating such level of support is excessive or unnecessary, and appreciating that while the need for tutoring assistance may be less now, it may be greater than five hours per week in later years, I allow the claims for tutoring as presented.

114. With respect to claims for vocational counseling and job coaching as an adult, Dr. K recommended access to a job coach to negotiate any accommodation required in her work. Neither Dr. R nor Dr. AT address the subject of adult vocational counselling or coaching. DR in her first report stated the Claimant may require periodic vocational services (when she transitions between jobs) – a statement with which Dr. C agreed. JH, the Respondent's expert reviewed the costs estimated by (DR) "for tutoring vocational support services and job coaching" and simply noted that these are "difficult areas to forecast at the best of times.". There is no challenge to DR's qualification to provide an opinion respecting the possible frequency of these services, and the case law supports qualifications of an occupational therapist to do so. In these circumstances there is no reason not to accept DR's evidence and I allow these items.
115. The total cost for all the vocational/educational services is \$77,750.00. The present value of these services, based upon DB's report [Exhibit 2, Tab 13, Tables 1 and 2] are \$1,500.00, \$43,228.00 and \$11,923.00 for a total award of \$56,650.00 [rounded].

Physiotherapy

116. The Respondent agrees that "some intermittent" physiotherapy treatments are appropriate. The claim for physiotherapy is presented on the basis of one treatment per month for life at an annual cost of \$768.00. The Claimant at the time of the hearing was still receiving monthly physiotherapy treatments. DR asserts that it is "anticipated" that physiotherapy will continue on a long term basis. DR notes Dr. AT in his first report (October 16, 2008) indicated the Claimant was still benefiting from monthly physiotherapy treatments.

However, I conclude that the reason Dr. AT thought there was an ongoing need for monthly physiotherapy treatments was because of the difficulty in having children follow through with regular exercise programs. Dr. AT recommended that within a year or two the Claimant be assisted in getting into a gym and receiving some initial assistance from a trainer and then receiving periodic review of her self-exercise program, periodically for an additional two to three years. I accept the opinion Dr. AT. I do not find there is medical justification for life time monthly physiotherapy treatments. I award \$1,600.00 for physiotherapy.

Exercise Program

117. The Respondent agrees that some initial advise as to an appropriate exercise program is reasonable. The claim as presented consists of four components, namely services of:

- a) a kinesiologist/personal trainer twice per week for one to two years at a cost of between \$7,800.00 and \$15,600.00;
- b) periodic consultation with a kinesiologist/personal trainer four times per year for two to three years at a cost between \$1,200.00 and \$1,800.00;
- c) a yearly pass at a fitness centre at an annual cost of \$598.00;
- d) an allowance of between \$1,000.00 and \$2,000.00 towards the purchase of home exercise equipment.

There is support for these items in the reports of either Dr. AT or DR and I allow:

\$12,000.00 for kinesiologist/personal trainer services;
\$ 1,500.00 for periodic consultations;
\$15,600.00 for a fitness centre pass [present value, rounded]; and
\$ 1,000.00 for home exercise equipment.

\$30,100.00 TOTAL AWARD FOR THESE ITEMS

Medication

118. The Respondent agrees that some contribution towards purchasing pain medication is appropriate. The claim is presented at \$50.00 per month commencing at age 50 for life. Dr. R says it is "likely" that the Claimant will require oral pain medication for symptomatic cervical spine arthritis later in life. I award this claim, which has a present value of **\$3,225.00** [rounded].

Psychiatric Counselling

119. The claim is presented on the basis of six to twelve sessions on each of five separate occasions at a cost of between \$3,900.00 and \$9,600.00. Dr. AT recommended the Claimant have access to counseling during her teenage years because of the possibility of teasing by her peers or for general body issues. Dr. K recommended psychotherapy "when and if" she requires it during adolescence but also recommends it at later stages in life such as entry into adulthood, relationships and family development. As noted previously, at present the Claimant appears well adjusted. She may or may not require psychotherapy services at all. I find however there is a real and substantial risk that she

will require psychotherapy services likely during her teenage years. I allow \$3,000.00 for psychotherapy services.

Costs Associated with Future Surgery

120. The Respondent agrees there should be some allowance for costs associated with possible knee surgery. The claim for post-surgical care is based on three future surgeries.

A. Right knee surgery to repair ligament damage.

Surgery is expected to occur in the summer 2010. The associated costs are 52 therapy sessions in the total amount \$3,328.00. That surgery is required [Dr. R, second report, page 2] and involves six months' of rehabilitation with two visits per week during that time. I award this claim at \$3,325.00 [rounded].

B. Right knee replacement surgery.

Right knee replacement surgery with associated costs for nursing services, care aid services, home cleaning services and physiotherapy is presented in the total amount of \$5,811.00. Neither Dr. R nor Dr. C addresses the subject matter of knee replacement surgery. Dr. AT's evidence is that it is possible the Claimant may require a knee replacement in her 60's or even 70's which would entail at least a three to four month period of therapy.

C. Cervical Spine Surgery.

Dr. R's evidence is that it is likely the Claimant will develop arthritis in her neck in her sixth decade, or possibly in her fifth decade if she selects a physically demanding job. It

is possible but not likely that she will require neck surgery. Dr. AT's evidence is that there is no way to know whether surgery will or will not be required; the Claimant is simply at greater risk than an otherwise uninjured individual. Dr. C agrees that neck surgery is possible. The claim is presented at a total of \$17,472.00 consisting of nursing, care aide, home cleaning services, physiotherapy and a physical exercise program with a kinesiologist. If these two surgeries were to occur when the Claimant was 55 - 60 years of age, the present value for all of the associated costs would be slightly less than \$4,500. That is on the basis of treating both surgeries as certainties. Neither surgery is even a probability. There is simply an enhanced risk. I award **\$1,500.00** for the cost of care associated with the possible right knee replacement and neck surgeries.

Occupational Therapy Services

121. This claim is presented at between \$3,900.00 to \$5,850.00 for three occupational therapy consultations of five hours each and two series of occupational therapy treatment sessions of 12 hours each. The assessments are recommended by DR for occasions when there are changes in the Claimant's physical condition. The recommendation is for an assessment when the Claimant is in her 50's, in her 70's, and once post-surgery. The recommendations for occupational therapy treatment are on two occasions, one immediately and a second during adolescence. Neither Dr. R nor Dr. AT nor Dr. C have addressed this issue. DR is nevertheless qualified to make this recommendation which is not otherwise challenged. The future occupational therapy assessments are tied to future events that are uncertain either as to whether they will occur or when they will occur. I award **\$1,300.00** for occupational therapy.

Equipment

122. The Respondent notes that in his first report Dr. AT stated that the Claimant did not require any specific adaptive equipment for her personal care or any special adaptive equipment in the home. The equipment claim is presented at:

\$ 100.00 per year for life commencing at age 50;
\$8,000.00 to purchase a motorized scooter at age 60 and an
additional allowance for battery replacements thereafter; and
\$ 300.00 - \$400.00 for initial shoe orthotics, and an additional amount for
replacement every 3 - 5 years.

In his second report Dr. AT indicates there is a possibility the Claimant may need ambulatory assistance including a motorized scooter in her 60's or 70's. It is possible that the changes requiring mobility aides could occur in the Claimants late 40's or early 50's but is more probable that they will occur in her 60's or 70's, "if and when they do occur.". In his first report Dr. AT indicates that the Claimant's "flat feet may also contributing to the ankle symptoms and she may benefit from orthotics in her shoes.". This is a reference to left ankle symptoms. It does not appear that the "flat feet" for which the orthotics are suggested, is related to the accident. I make no award for orthotics. The present value of the motorized scooter and other equipment items is approximately \$2,300.00. However, whether they will ever be required is not a probability. It is simply an unqualified possibility. I award \$600.00 for these equipment items.

Transportation

123. The claim for transportation consists of:
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| \$4,680.00 | taxi expense per year commencing at age 50; |
| \$ 500.00 - \$850.00 | a driver rehabilitation assessment; |
| \$1,000.00 - \$1,200.00 | hand controls, etc.; |
| \$ 600.00 - \$1,000.00 | driver rehabilitation training. |

The taxi allowance is based on the assumption that the Claimant will no longer be able to drive a vehicle following cervical surgery at age 50. The allowance for hand controls is on the basis that right leg fatigue may make it unsafe for the Claimant to operate a vehicle with hydraulic brakes. The medical evidence is that it is probable that the Claimant will not require cervical surgery. Dr A.T. describes the need for vehicle hand controls as "outside risk" that is "unlikely.". I think that the transportation expense claim does enter the realm of speculation and I decline to make an allowance for it.

Home Cleaning and Exterior Yard Maintenance

124. This is by far the largest claim. It is presented at a present value of approximately \$223,000.00 on the basis that the Claimant will require assistance for two hours per week from age 20 to 24 and 10 hours per week for life commencing at age 25. The Respondent submits that the Claimant can do most things at present but acknowledges that she will require some help for heavier household tasks. DR's calculation is based upon a Statistics Canada publication as to how much time women aged 25 to 54 years who work outside of the home and also participate in housework spend on "core tasks" (meal preparation, indoor cleaning, laundry) and "non-core tasks" (outdoor cleaning, interior and exterior home maintenance and repair). DR also assumes the Claimant will have two children, the first when the Claimant is age 25 and her need for extra assistance will

increase until the children reach adulthood at which point the Claimant may be suffering from the onset of cervical arthritis and thus requiring substantial assistance. Dr. R in his first report at page 3 indicates it is unlikely the Claimant would require support in her home as a result of her injury. Dr. C agrees with Dr. R's opinion in paragraphs 2 and 3, page 3 of Dr. R's first report and hence appears to agree with Dr. R on this issue. On the other hand, Dr. AT in his first report at page 8 says that although the Claimant "should be capable of doing most chores and activities around the home, both now and in the future as she grows older, she would have some problems with heavier work around the home and would certainly not be able to do heavy garden work, climbing ladders, scaffoldings, cleaning gutters and other such activities". She would have to hire people to help inside the home for the general heavier home chores and for the outside work described. I am inclined to prefer the opinion of Dr. AT in whose specialty this question appears to fall more directly, to those of the orthopaedic surgeons. It also makes sense, in view of the unanimous opinion that the Claimant ought not to engage in occupations involving heavy work or manual labour and in view of Dr. AT's concern about frequent use of stairs and in view of the concern about excessive strain on the right leg causing weakness and loss of balance that the Claimant should also avoid heavy household and yard chores. It also makes common sense that an early onset symptomatic cervical arthritis might also require the Claimant to obtain help with heavy household chores earlier than she might otherwise have done. Having said that, however, in view of two contrary opinions from orthopaedic surgeons, I also approach the question on the basis that there is a real and substantial possibility, and not a probability, that this additional help will be necessary. I am also mindful that DR's estimate of costs is based on all of the assumptions set out at page 19 of her cost of care assessment, which add additional uncertainty. I award \$75,000.00 for this claim.

SUMMARY

125. Where indicated with respect to particular cost of care items, I have applied a contingency based on the evidence with respect to the likelihood that each particular service or item will be required. I have not applied any further general contingency. I accept the Claimant's submission that any other negative contingencies are balanced by other contingencies not taken into account, including the prospect of early future deterioration in the Claimant's late 40's or 50's and the absence of any claim for additional costs associated with home renovation or home selection arising out of the Claimant's disabilities.

126. In summary, I award the following amounts for cost of future care:

\$ 56,650.00	vocational and educational services;
\$ 1,600.00	physiotherapy;
\$ 30,100.00	exercise program;
\$ 3,225.00	medication;
\$ 3,000.00	psychiatric counselling;
\$ 4,825.00	future surgery costs;
\$ 1,300.00	occupational therapy;
\$ 600.00	equipment;
\$ 0	transportation;
\$ 75,000.00	home cleaning/exterior maintenance

\$176,300.00

TOTAL OF THESE ITEMS

IN-TRUST CLAIM

127. The Claimant advances an "in trust" claim in the amount of \$25,000.00 for services rendered by HS after the Claimant's discharge from Sunnyhill.
128. There is no dispute regarding the applicable legal principles which are summarized in *Fullerton v. Delair* (2005 B.C.S.C. 204) @ para. 344 as follows:
- "(a) The services provided must replace services necessary for the care of the plaintiff;
 - (b) If the services are provided by a family member they must be over and above what would be expected from the family relationship;
 - (c) The maximum value of the services is the cost of obtaining the services outside the family;
 - (d) Where the opportunity cost to the care giving family member is lower than the cost of obtaining the services independently, the court will award the lower amount;
 - (e) The quantification should reflect the true and reasonable value of the services performed taking into account the time, quality and nature of those services;
 - (f) Family members providing the services need not forego other income and there need not be payment for the services rendered."

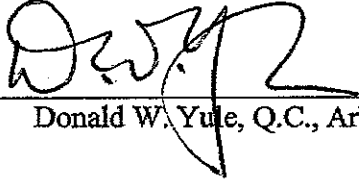
129. In this case HS did take time off from her employment and forthrightly estimated that her lost income, attributable to the period when she was looking after the Claimant, as opposed to her sister, Ms. RS, was about \$2,000.00. On discharge from Sunnyhill, the Claimant was clearly unable to care for herself. She required constant assistance and supervision. HS fastidiously followed the direction that the Claimant should always wear the Minerva brace, except when she was lying in bed, protected by sandbags. When the Claimant was up, she was, for the most part, never out of HS' reach, for fear of falling. In terms of body functions, HS treated the 10 year old Claimant "like a toddler" again. I find that the services rendered by HS were over and above what would be expected from a family member.
130. The Respondent points out that Mr. RS was retired, at home, and could have provided at least some of the services, had HS not taken a leave of absence from her work. The Respondent submits that the \$2,000.00 of foregone income is the correct measure of the loss and reasonable in this case. The Claimant submits that HS was providing round the clock care (even sleeping in the same bed as the Claimant) so that the foregone income represents only a portion of only 5 days per week.
131. I note two other factors that are relevant according to the case law. The first is that the services provided by HS were not ones requiring special skills or special training or instruction. Second, the services were performed over a comparatively short period of time, the bulk of them between mid-April, 2006 when the Claimant commenced home visits and mid-May, 2006 by which time the Claimant had returned to school and ceased using the Minerva brace. I think there is merit in the Claimant's submission that the foregone wages only represent a portion of the time when HS was essentially providing full-time care to the Claimant. I award **\$3,500.00** in trust for the services of HS.

SUMMARY OF AWARD

132. In summary, I assess damages as follows:

\$140,000.00	non-pecuniary damages
\$250,000.00	loss of earning capacity
\$176,300.00	cost of future care
\$ 3,500.00	in trust claim
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<u>\$569,800.00</u>	TOTAL

DATED at the City of Vancouver, BC this 28th day of May, 2009.



Donald W. Yule, Q.C., Arbitrator