Manitoba

Automobile Injury Compensation Appeal Commission

IN THE MATTER OF an Appeal by [the Appellant]
AICAC File No.: AC-14-071

PANEL:	**Mr. Mel Myers, Q.C. Chairperson** **Dr. Sheldon Claman** **Ms Janet Frohlich**
APPEARANCES:	**The Appellant, [text deleted], was represented by [text deleted];** **Manitoba Public Insurance Corporation ('MPIC') was represented by Mr. Trevor Brown.**
HEARING DATE:	**October 29, 2014 and August 13, 2015**
ISSUE(S):	**Whether there was a causal connection between the Appellant's cognitive deficits and deterioration and the motor vehicle accident of August 12, 2010.**
RELEVANT SECTIONS:	**Section 70(1) and 71(1) of The Manitoba Public Insurance Corporation Act ('MPIC Act')**

AICAC NOTE: THIS DECISION HAS BEEN EDITED TO PROTECT THE APPELLANT'S PRIVACY AND TO KEEP PERSONAL INFORMATION CONFIDENTIAL. REFERENCES TO THE APPELLANT'S PERSONAL HEALTH INFORMATION AND OTHER PERSONAL IDENTIFYING INFORMATION HAVE BEEN REMOVED.

Reasons For Decision

[The Appellant] was involved in a motor vehicle accident on August 12, 2010.

While driving his motor vehicle, the Appellant rear-ended another vehicle and struck a utility pole. An examination of the ambulance report indicates the Appellant was conscious when the paramedics arrived approximately 25 minutes after the motor vehicle accident. The paramedic report indicated:

1. No loss of consciousness was reported by the Appellant or by other witnesses to the accident.
2. The Appellant was alert, his pupils were equal and reactive to light and was not reporting any symptoms of headache, dizziness or nausea.
3. His GCS was 14/15.
4. When he was transported to the hospital it was noted the Appellant was confused with no recall of the motor vehicle accident or the events leading up to the accident.
5. The Emergency Room records indicated that when the Appellant was examined he was alert and fully oriented.

A neurological examination performed at that time was normal and the CT imaging of his brain revealed no evidence of intra or axial hemorrhage, infarct or mass. As a result of the motor vehicle accident the Appellant sustained a traumatic injury of left rib fracture, lung contusion and nasal fracture. The Appellant was discharged from the hospital the same day.

Application for Compensation:

An Application for Compensation dated August 18, 2010 was completed by the Appellant. The Appellant set out the injuries sustained in the motor vehicle accident as two broken ribs, bruised lung, broken nose, loss of consciousness (retrograde amnesia), back pain, small cut under nose, bruising to left and right chest, bruising left inside and outside elbow, cut to right shin, and facial bruising near chin.

Medical History following Motor Vehicle Accident:

The Primary Health Report completed by the Appellant's doctor, [Appellant's doctor #1], dated September 6, 2010 indicated that he presented with pain due to his fractured ribs, pulmonary

contusion and soft tissue injuries, as well as complaints of sleep disturbance, anxiety and depression were also noted. [Appellant's doctor #1's] report did not note any cognitive symptoms and the neurological examination performed by him at that time was reported as normal.

Due to the Appellant's wife expressing concerns about the Appellant's memory, [Appellant's doctor #1] referred the Appellant to [Appellant's neurologist] for a neurological consultation.

In a note to file, MPIC's case manager stated that based on a file review there was evidence of a moderate concussion based on a GCS of 14 out of 15 and altered level of consciousness for approximately one hour. There are no documented cognitive or emotional issues at this time and the Appellant was expected to return to work on October 4, 2010.

MPIC referred the Appellant's file to [MPIC's psychologist], MPIC's consulting clinical psychologist. In a report dated September 24, 2010 [MPIC's psychologist] stated that based on a review of medical documents available at the time of his review the following permanent impairment entitlement is applicable to the Appellant's injury:

"**Subdivision 1: <u>Skull, Brain and Carotid Vessels</u>**

1.1 Cerebral concussion or contusion

(b) moderate (PTA > 30 min < 24 hours or LOC > 5 min < 1 hr) 2%"

[Appellant's psychologist] further noted that this determination does not preclude the possibility of additional permanent impairment entitlements for physical, cognitive or psychological conditions that may arise as a result of the motor vehicle accident in question.

[Appellant's doctor #2] referred the Appellant to [Appellant's cardiac electrophysiologist], a cardiac electrophysiologist and cardiologist. [Appellant's cardiac electrophysiologist] reported that he had the opportunity of seeing the Appellant for the evaluation of his 2 syncopal episodes over the last few months. In his report dated December 1, 2010, [Appellant's cardiac electrophysiologist] stated:

> "[The Appellant] presented to the emergency room today after sustaining a second syncopal episode. He was playing pool yesterday in the basement whereupon he felt a sensation of warmness throughout his body followed by dizziness and subsequently passed out. There was no bowel or bladder incontinence and he had essentially full recovery within 30 seconds. There were no preceding symptoms of chest pain, shortness of breath or palpitations.
>
> On August 12th, 2010 he was driving to work and collided with another vehicle. He had no warning signs such as chest pain, shortness of breath or dizziness and allegedly he crashed into the oncoming vehicle twice, suggestive that he had 2 syncopal episodes back to back in that setting."

[Appellant's cardiac electrophysiologist] further stated:

> "**Impression:** [The Appellant] is a [text deleted] year old gentleman presenting with 2 separate incidents of syncope NYD. The most recent event does have some features suggestive of a vaso vagal etiology; however, his first event that led to a motor vehicle accident does not have these features.
>
> **Recommendations:**
>
> 1) In light of the 2 syncopal episodes that essentially to (sic) not have a clear etiology, I will make arrangements for him to undergo a diagnostic electrophysiologic study. The risks and benefits of the procedure have been explained.
> 2) In light of his syncope NYD, driving restrictions for a private vehicle will be for 3 months and I have asked him to avoid the use of any heavy equipment, which essentially precludes him from going to work until we can rule out any sinister etiologies of his syncope."

[Appellant's neurologist], in a report dated March 9, 2011, stated that subsequent to the motor vehicle accident the Appellant underwent thoracic surgery which was not connected to the motor vehicle accident. [Appellant's neurologist] further stated that:

> "His wife feels that the memory was markedly affected after the MVA. Since the thoracic surgery he has gradually been getting better, memory has been improving. He

has not gone back to work since the blackout but is functioning almost as usual at home. He has gone out shopping alone on occason (sic)."

[Appellant's neurologist] conducted a series of standardized tests and reported:

"MMSE: 24/30
Recall@3 min: 0/3 PSMS: 23/24
Digit Cancellation 45 sec: 26 ADL: 36/50
Mental control : 3/9 CDR : 0.5 sb : 1.5
Digit span (for/rev) : WMS HIS:
Category Fluency: Animals: 15 (z)
Object naming: /30
Complex figure test (rof):
Copy: 33/36 (z); 3' recall: 12/36 (z)]

ASSESSMENT:
There is evidnce (sic) of impaired memory. There is fairly marked bradyphrenia and depression should be excluded. If not checked previously please ensure that thyroid functions are normal. Diffuse cerebral injury after blunt trauma can produce similar signs and I will arrange for him to have an MRI scan of the brain to explore this possibility." (Underlining added)

In the report dated March 9, 2011, [Appellant's neurologist] stated that he provided the Appellant with standardized tests and felt that there was evidence of impaired memory. The Appellant was referred for an MRI scan of his brain.

Having regard to the Appellant's blackout, [Appellant's neurologist] arranged to reassess once the EEG report is back and the MRI completed. The MRI report of the Appellant's brain occurred on May 1, 2011. This report was provided to [Appellant's neurologist] and states:

"IMPRESSION:

Features of remote micro hemorrhage in the periventricular white matter in both cerebral hemispheres could be in keeping with diffuse axonal injury." (Underlining added)

[Appellant's neurologist] provided a report to the Appellant's family doctor, [Appellant's doctor #1], on July 11, 2011 and stated:

> "[The Appellant] was re-evaluated today with respect to the memory concerns. [The Appellant] was last examined on 9 MAR 2011. Since that time his wife feels that his memory has been improved to some degree. He has surgery planned for his nose next week and possibly a hernia as well. He cannot remember directions when driving. He is functioning relatively well in other respects at home. (Underlining added)
>
> EXAM:
> He is alert, affect again is flat, there is little spontaneous speech. He does respond appropriately though. MMSE: 26/30; recall 3/3 at 2 min.
>
> INVESTIGATIONS:
> MRI: remote subcortical white matter hemorrhages. No hippocampal atrophy.
> EEG: normal
>
> ASSESSMENT:
> There is some evidence of impovement (sic) in cognition in recent months, consistent with a post traumatic cause.
> DIAGNOSIS:
> Diffuse axonal injury of the brain, secondary to closed head trauma
>
> RECOMMENDATIONS:
> He should have a vocational rehab assessment.
> I have asked his wife to notify MPIC regarding the cerebral injury and hopefully arrangements can be made through them.
>
> He should not be driving at this time because of the blackouts. I am not sure what has been done about that in the past but he appears to still have a carduac (sic) valvular lesion and cardiology will need to assess his risk of further blackouts."

[Appellant's neurologist] provided a further report on August 8, 2011. In this report [Appellant's neurologist] indicates that he re-evaluated the Appellant in respect of his head injury and stated:

> "He complains of dizziness and brief headache "just pressure" lasting a few minutes. He gets frustrated easily, may get angry when prodded to do something he has difficulty doing. His wife is worried.
>
> EXAM:
> No change
>
> ASSESSMENT:
> No change
>
> DIAGNOSIS:

> Diffuse axonal injury of the brain, secondary to closed head trauma
>
> ...
>
> He would benefit I feel from a Head Injury Rehab program and if MPIC cannot arrange this for him then I would suggest referring him to Rehab Medicine at [hospital] in [text deleted]."

In [Appellant's neurologist's] report of November 15, 2011, he states that the Appellant's wife reported that his memory was markedly impaired by the motor vehicle accident and in the subsequent year she noted a gradual improvement in his memory. [Appellant's neurologist] stated:

> "To address you (sic) specific questions, I suspect that he did sustain a brain injury because of his cognitive symptoms immediately following the accident and the evidence of facial trauma suggesting significant blunt trauma to the head. Usually this would result in acceleration/deceleration forces on the brain, and when severe enough, injury to the brain either by diffuse axonal injury or by macroscopic lesions. MRI done this year demonstrates widespread and bilateral microhemorrhages which are consistent with diffuse axonal injury of the brain.
>
> Mental status exam on 9 MAR 2011 demonstrates mild impairment of cognitive function when compared to his age and education peers on the Mini-mental state examination. Verbal memory was impaired on the subtest of the Mini-mental state examination. Nonverbal memory fell in the low-average range. There was evidence of impaired executive function on the Mental Control subtest of the Wechsler Memory Scale.
>
> The MRI scan results suggest that there has been an injury to the brain and the probability is that there was a decline in cognitive function as a result. The test scores represent a combination of his pre-accident cognitive status and the likely superimposed physical injury to the brain. What the relative contributions are is impossible to say based on the information at hand. A Neuropsychological evaluation may be able to help with that assessment." (Underlining added)

Pursuant to [Appellant's neurologist's] recommendation for a neuropsychological assessment, MPIC requested [independent neuropsychologist #1] to conduct such an assessment. [Independent neuropsychologist #1] carried out the assessment on January 19, 2012 and provided a report to MPIC on January 27, 2012 in which she stated:

> "While it is possible that [the Appellant] may be exhibiting some mild decrements in verbal memory and executive cognitive functioning, in my opinion, it is unlikely that the motor vehicle accident in question would be a contributing factor to any deficits present. On the basis of [the Appellant's] provided medical records and reported history, it does not appear that he experienced a clear loss of consciousness as a result of the accident. He was found conscious by the emergency medical responders when they arrived at the scene (approximately 25 minutes following the accident per their records). He was noted to be alert and, although he exhibited no recall of the accident (and appears to have suffered a window of PTA of between ½ hour and an hour), his GCS was 14/15, his pupils were equal and reactive, and he neither reported nor demonstrated any focal neurological sings. He was fully alert and oriented within an hour of the accident per his emergency room records, with a GCS of 15/15, his neurological examination was normal, and the CT scan performed at that time revealed no evidence of intracranial abnormality. Collectively, this would suggest that [the Appellant] sustained a moderate concussion – which is an injury which would not be expected to result in lasting cognitive impairments.
>
> Consistent with this, [Appellant's doctor #1's] report dated September 6, 2010 indicates that [the Appellant's] neurological examination was normal at that time, with no observed cognitive concerns. This would also be consistent with the information provided by both [the Appellant and the Appellant's wife] in interview, whereby few cognitive concerns were noted immediately following the accident. Thus, in my opinion, if [the Appellant] is exhibiting any cognitive difficulties, on the balance of probability, this would not be related to the injuries he sustained in the motor vehicle accident.
>
> Although [the Appellant] did not demonstrate any obvious cognitive difficulties throughout my interactions with him, I was not able to obtain a complete neuropsychological test profile. Although no deficits were seen in terms of overall intellectual ability, attention/concentration, language ability, visuospatial ability, or visual memory. I was not able to obtain valid test results in terms of verbal memory or executive cognitive functioning, despite the use of additional testing." (Underlining added)

[Independent neuropsychologist #1] also stated:

> "...I am reluctant to definitively dismiss the possibility that he may be exhibiting some mild difficulties secondary to a vascular etioloty (sic). My recommendation would be that [the Appellant] continue to follow with [Appellant's neurologist] as planned. ..."

[Appellant's doctor #1] referred the Appellant to [Appellant's physiatrist], a physiatrist.

[Appellant's physiatrist] provided a report on February 3, 2012. [Appellant's physiatrist] stated:

> "The patient's traumatic brain injury sustained in August 2010 resulted in cognitive impairment, abnormal higher order balance, episodes of lightheadedness, intermittent blurry vision, diplopia and headaches. His cognitive functions were assessed by recent

> neuropsychological assessment. Today his informal assessment revealed deficits in memory, information processing speed, and simple calculations. According to the patient and his wife, his mood and personality have partially changed since his injury. He became short tempered, irritable and often angry over small things. He is often frustrated because of his current limitations.
>
> His mild difficulties with breathing and stuffy nose sensation are likely related to nasal septum deformity."

[Appellant's doctor #1] referred the Appellant to a psychiatrist, [Appellant's psychiatrist], who provided a report on April 11, 2012. In this report [Appellant's physiatrist] stated:

> "[The Appellant] and his wife reported symptoms of short-term memory deficits but it did not appear to significantly impact daily functioning as he appears to be relatively independent in his activities of daily living. There was no evidence of a progressive decline in cognitive functioning and his neuropsychological testing also did not point towards a dementing process."

[Appellant's neurologist] provided a report to the Appellant's family doctor, [Appellant's doctor #1], on July 10, 2012. In this report, [Appellant's neurologist] indicated that he had seen the Appellant and stated:

> "Still gets dizzy spells. Last blackout about 3 months ago, when sitting and talking at home his head started to bob up and down then his mouth started to move "funny" and he passed out. He was confusd (sic) when his wife woke him up. They went to the hospital, spent all day, in the end there was no indication of the cause or treatment. They were told that they did not think it was a seizure...
>
> EXAM:
> No initiation of speech but terse appropriate responses to direct questions. MMSE 27/30. Digit cancellation 45 s: 15. Category fluency 60s: 12.
>
> ASSESS:
> The fuindings (sic) ar (sic) likely the result of closed head injury. Complex partial seizure should be excluded. The micro-hemorrhages on MRI scan are likely secondary to closed head injury. I will arrange for a repeat EEG. No anticonvulsant at this time." (underlining added)

On October 29, 2012 [Appellant's neurologist] reported that:

> "The EEG demonstrates changes which ar (sic) mild, diffuse, nonspecific but which are not normal. [The Appellant] continues to have problems. He cannot return to work. He cannot drive because of his dizzy spells. He is limited in what he can do at home,

> gets light headed when bending over. He helps with some chores but this a change from his preaccident mental state and functional status...
>
> The history indicates that he had a period of posttraumatic amnesia following the accident. He has retrograde amnesia subsequent to the accident in question and I doubt that these facts were fabricated by this patient. The EEG demonstrates a diffuse abnormality and the MRI scan demonstrates changes quite consistent with diffuse axonal injury. It is my impression that the evidence points to a brain injury resulting from the accident in question...
>
> It appears to me that he is intitled (sic) to compensation by MPIC. There is evidence of cerebral injury after the concussion. There does not appear to be evidence of another cause for these objective changes. IF MPIC believes there are additional causes then it would be appropriate to apportion the degree of compensation based on other factors."

[Independent neuropsychologist #1] conducted a follow-up neuropsychological assessment on November 16, 2012 and provided a report to MPIC that stated:

1. The Appellant's psychological test findings were felt to be valid and on many of the tests administered the scores were lower than during prior testing.
2. The Appellant presented as significantly worse than he did during her assessment 10 months prior.
3. She observed profound deficits in the memory functioning, attentional functioning, executive functioning and processing speed in contrast to mild difficulties in verbal memory and executive functioning during the initial neuropsychological assessment.
4. She felt that the Appellant was no longer cognitively able to return to his pre-accident employment or employment of any kind.
5. In her opinion the Appellant's cognitive deficits were likely related to the moderate severity concussion he had sustained during the motor vehicle accident one year prior.
6. She also felt that the pattern of the Appellant's deficits on standardized neuropsychological testing was consistent with a vascular etiology.

7. She recommended that the Appellant continue to follow [Appellant's neurologist] and undergo further medical investigations to determine the specific cause of his declining cognitive abilities, including repeat MRI and EEG testing.

At [Appellant's neurologist's] request, an MRI brain scan was completed at [hospital] on January 15, 2013. This report stated that the scan was to determine whether the Appellant's cognitive impairment was attributable to diffuse axonal injury, amyloid angiopathy, or strokes. This report indicates there is evidence of diffuse cerebral atrophy. The report further indicates there is evidence of "Two previous microhermorrheges". There were no T2 signal abnormalities that would have suggested a more diffuse axonal injury.

Case Manager's Decision – 7 May 2013:

The case manager wrote to the Appellant on May 7, 2013 indicating:

> "The Health Care Services review of April 25, 2013 (attached), outlined that your current cognitive deficits and cognitive deterioration since the motor vehicle accident are not as a result of injuries sustained in the motor vehicle accident of August 12, 2010.
>
> It is acknowledged that you sustained a moderate concussion in the motor vehicle accident. As such, you were previously provided with a permanent impairment entitlement for cerebral concussion (2%) and Post-traumatic alteration of tissue (2%).
>
> The nature and severity of the injury would not be expected to result in the significant levels of impairment observed currently, or the progressive deterioration in functioning over time. Therefore, we are unable to consider further permanent impairment or Income Replacement."

The report from [Independent neuropsychologist #1] of November 16, 2012 was attached to the case manager's decision.

Application for Review:

An Application for Review was filed by the Appellant to the Internal Review Officer.

On July 24, 2013, the Internal Review Officer wrote to the Appellant and stated:

> "As discussed at the hearing, I am recommending an independent neuropsychological assessment to help with this most complicated matter. With this new information forthcoming, a preferable process in which to determine your entitlement to PIPP benefits is to have the case manager reconsider the earlier decision of May 7, 2013, based upon all new evidence.
>
> **"Corporation may reconsider new information**
>
> 171(1) The corporation may at any time make a fresh decision in respect of a claim for compensation where it is satisfied that new information is available in respect of the claim."
>
> By way of this letter, I am instructing the case manager to reconsider the decision based upon the independent neuropsychological assessment report and issue a new decision. Such a reconsideration decision will have the right to proceed to internal review. I am therefore closing the file in the internal review office but emphasize the file is not being closed in the claims department."

[Independent neuropsychologist #2's] Report dated October 9, 2013:

[Independent neuropsychologist #2], a clinical psychologist and neuropsychologist, was requested by MPIC to conduct a neuropsychological assessment of the Appellant. [Independent neuropsychologist #2] reported on October 9, 2013 setting out the results of her assessment and stated:

> "It is likely that [the Appellant] sustained a traumatic brain injury as a result of the motor vehicle accident. His medical records provide evidence of posttraumatic amnesia and an altered level of consciousness immediately following the MVA (i.e., confusion, an initial GCS estimate of 14 out of 15). There is also evidence of head and body trauma in that he sustained a fractured nose and rib fractures. The brain injury would be classified as mild-TBI based on the estimated length of PTA and GCS score.
>
> ...
>
> The etiology for [the Appellant's] cognitive decline is unknown. It is my impression that his cognitive decline is unlikely to be related to the brain injury he sustained during the August 12, 2010 MVA. Although I cannot rule out the possibility that he experienced some cognitive changes post-MVA, I can relate neither the severity of his impairments nor the decline in his abilities over time to the mild traumatic brain injury he sustained two years ago." (Underlining added)

[Independent neuropsychologist #2] further stated:

> "...I am concerned about [the Appellant's] cognitive decline and the decrease in neuropsychological test scores over the past year. He has now seen many of these neuropsychological measures during three assessments over the past year and a half. The decrease in his performance is striking given expectations for practice effects and familiarity with the assessment process. I could not find any obvious reason for the decline He reports no substance use, no acute effects of medication, or sleep issues. (Underlining added)"

Case Manager's Decision – 25 October 2013:

On October 25, 2013 the case manager wrote to the Appellant rejecting his request for further IRI or permanent impairment entitlement. The case manager rejected the Appellant's request as a result of the reports from [independent neuropsychologist #1] and [independent neuropsychologist #2] and stated:

> "By way of history, [independent neuropsychologist #1] conducted a Neuropsychological evaluation on January 27, 2012 as well as follow up neuropsychological assessments on November 6, 2012. As a result of these assessments [independent neuropsychologist #1] provided an opinion that the cognitive deficits indentified (sic) in the assessments were unlikely to be related to the moderate severity concussion you sustained in the motor vehicle accident.
>
> You requested a review of our decision dated May 7, 2013 that outlined no further Income Replacement or Permanent Impairment entitlements would be issued. The internal review officer, as discussed at the hearing, recommended a 2nd Independent Neuropsychological Assessment (copy enclosed) which was completed by [independent neuropsychologist #2] on September 17, 2013.
>
> [Independent neuropsychologist] provided an opinion based on the outcome of the above mentioned assessment that your cognitive decline is unlikely to be related to the mild brain injury you sustained during the August 12, 2010 motor vehicle accident. [She] was unable to relate the severity of your impairments or the decline in your abilities to the mild brain injury sustained in the accident."

Application for Review – 12 November 2013:

On November 12, 2013 the Appellant applied for a review of the case manager's decision of October 25, 2013. In this Application for Review the Appellant stated that he did not agree with

the decision due to the fact that [independent neuropsychologist #2] could not say with certainty how the Appellant was affected by the brain trauma and therefore how could she be sure the Appellant was compensated enough.

Internal Review Officer's Decision – 25 February 2014:

The Internal Review Officer noted the Appellant was involved in a motor vehicle accident on August 12, 2010 and suffered left rib fractures, traumatic brain injury, lung contusion and nasal fracture. The family physician, [Appellant's doctor #1], referred the Appellant to the neurologist, [Appellant neurologist], with concerns about the Appellant's memory. [Appellant's neurologist], in a report dated March 9, 2011 concluded that the standardized tests indicated there was evidence of an impaired memory and referred the Appellant for an MRI scan of the brain. The MRI report dated May 1, 2011 indicated a diffuse axonal injury. [Appellant's neurologist] referred the Appellant to the neuropsychologist, [independent neuropsychologist #1], who assessed the Appellant on two occasions. A subsequent MRI report indicated the Appellant was suffering from a diffuse cerebral atrophy. MPIC's independent neurological assessment was performed by [independent neuropsychologist #2] on September 17, 2013. [Independent neuropsychologist #2] concluded that it was unlikely the Appellant sustained a traumatic brain injury as a result of the motor vehicle accident, however, it was her impression based on testing that the Appellant's cognitive decline was unlikely related to the brain injury he sustained. The case manager issued a decision dated October 25, 2013 stating the Appellant's current cognitive deficits and deterioration could not be causally related to the accident of August 12, 2010. As a result the Appellant filed an appeal of the case manager's decision.

A telephone hearing was conducted with the Appellant's wife on February 10, 2014. The Appellant's wife indicated she did not agree with [independent neuropsychologist #2's] opinion.

The Internal Review Officer issued a decision dated February 25, 2014 dismissing the Appellant's Application for Review and pursuant to Section 70(1) of the MPIC Act concluded there was no causal relationship between the Appellant's cognitive defects and deterioration and the motor vehicle accident and dismissed the Appellant's Application for Review.

Notice of Appeal – 14 April 2014:

The Appellant filed a Notice of Appeal on April 14, 2014 completed by the Appellant's wife, [text deleted] and stated:

> "I don't believe the Compensation my husband received reflects the effect this accident had on my husband's life."

The relevant provision of the MPIC Act in respect of this appeal is:

> 70(1) In this Part,
>
> **"bodily injury caused by an automobile"** means any bodily injury caused by an automobile, by the use of an automobile, or by a load, including bodily injury caused by a trailer used with an automobile, but not including bodily injury caused
>
> (a) by the autonomous act of an animal that is part of the load, or
>
> (b) because of an action performed by the victim in connection with the maintenance, repair, alteration or improvement of an automobile;

[Appellant's neurologist's] Report dated March 5, 2015:

At the Commission's request [Appellant's neurologist] provided a report dated March 5, 2015. In his report [Appellant's neurologist] stated:

> "I cannot be certain that he sustained a concussion in the accident of 12 AUG 2010. It appears most likely that some other event caused him to lose control of the car initially, based on the witness account of the events and lack of skid marks on the road. It appears most likely at this time that the causative event was syncope secondary to cardiac arrhythmia, given that the initial cardiac rhythm when examined by EMS was Atrial Fibrillation, and given that he had several syncopal events after the accident, which eventually required treatment with a pacemaker." (Underlining added)

[Appellant's neurologist] further stated that:

1. He suspected the Appellant sustained a concussion or mild traumatic brain injury ("TBI"), or confusion after the motor vehicle accident.
2. In the month following the accident, from the account of the Appellant's wife, the Appellant was anxious, in a depressed mood, and sleep disrupted which are symptoms consistent with a post-traumatic syndrome.
3. There is a diagnostic uncertainty because there is no information about the Appellant's circulation in the initial minutes after the motor vehicle accident and it is impossible to know if there was a complete arrest of circulation for a period of minutes or how serious any decrease in blood pressure may have been.

[Appellant's neurologist] further stated that:

> "Finally, the MRI scan performed about 8 months after the accident in question demonstrated hemorrhages in the subcortical white matter in both frontal lobes. This would be a fairly typical location for shearing forces on the brain related to an acceleration-deceleration type injury resulting in diffuse axonal injury. Other types of vascular pathology could cause micro-hemorrhages however there is no evidence of any such vascular pathology on the scan and he has no risk factors for these. For example, if it is due to microangiopathic changes resulting from hypertension one commonly sees a great preponderance of ischemic changes and much less commonly hemorrhagic changes. There is no ischemic change reported here." (Underlining added)

[Appellant's neurologist] further stated that there was no objective evidence the Appellant had a decline in cognitive functions in the first six weeks after the motor vehicle accident. However, he stated that collateral history obtained from the Appellant's wife in March 2011 indicated that his memory declined significantly immediately following the accident. He further indicated that his memory was improving by four months after the injury. [Appellant's neurologist] stated that:

> "It is my impression that he likely sustained a mild TBI. In the absence of a macroscopic traumatic lesion identified on imaging studies such as a cerebral contusion, hematoma, laceration or ischemic infarction it is likely that his symptoms are the result of a microscopic injury such as diffuse axonal injury.

> ...
> I do not believe that his blackouts were caused by the accident. It is likely that cardiac arrhythmias caused his blackouts. I do not have the cardiologist's reports but it would be the usual reason why a pacemaker was inserted eventually. (Underlining added)
> ...
> It is my impression that [the Appellant's] mental state at that point in time was the result of a confluence of a variety of factors. It is most likely that there was an interaction between (a) his low educational level and possible learning disability and (b) brain aging, as well the effect of (c) mild TBI and possibly (d) early signs of a neurodegenerative disorder leading to dementia. I doubt that any one of these factors was solely responsible for the mental status exam findings at that time. But a mild TBI best explains the acute changes and pattern of recovery at that time."

[Appellant's neurologist] further stated that multiple factors commonly contribute to dementia later in life and it was his mild TBI that was a factor contributing to his cognitive impairment.

[MPIC's doctor's] Report dated May 11, 2015:

MPIC's Health Care Services consultant, [MPIC's doctor], provided an interdepartmental memorandum in which he responded to questions raised by MPIC's counsel.

[MPIC's doctor] concluded:

> "**Was [the Appellant's] amnesia and confusion after the collision a result of concussion?**
> No, on the balance of probability the patient's amnesia and confusion after the crash were not as a result of concussion. The most recent report from [Appellant's neurologist] indicates that [the Appellant] lost consciousness prior to the crash as a result of a heart rhythm disturbance. This caused the crash. The patient was probably unconscious at the time of the crash, and this accounts for his confusion and amnesia."

[MPIC's doctor] further stated that:

1. Information regarding the mechanism of the crash and the heart rhythm disturbance probably led to [Appellant's neurologist's] opinion that the Appellant suffered an episode of cardiac syncope which caused the crash.

2. "At this time, the patient was not diagnosed with a probable concussion, and there was no evidence of diffuse axonal injury. There was no diagnosis related to central nervous

system impairment. Patients with diffuse axonal injury are usually in a dense form of unconsciousness, such a (sic) persistent vegetative stated." (Underlining added)

3. At the time of the motor vehicle accident the Appellant was diagnosed with fractured ribs and a pulmonary contusion with other multiple contusions.
4. Shortly after the accident the Appellant saw a dentist and a chiropractor and there was no diagnosis of concussion.
5. The CT scan of the Appellant`s brain was normal.
6. The Appellant`s neurological examination was normal and the Appellant was not diagnosed with having a probable concussion. There were no findings consistent with the diagnosis of concussion, nor was that diagnosis made.
7. The Appellant was at work at that time and his condition did not cause any adverse affects at work.
8. Several months after the event in question the Appellant had not been diagnosed as suffering any brain injury.
9. There is a complete paucity of evidence on probable concussion being diagnosed in relationship to the motor vehicle accident.
10. [Appellant's neurologist] has stated that he cannot be certain that the patient sustained a concussion in the accident of August of 2010.
11. [Appellant's neurologist] stated that it appeared the motor vehicle accident was caused by a blackout because of a cardiac arrhythmia.

MPIC's legal counsel requested that [MPIC's doctor] respond to the following question:

"Based on the available evidence, did [the Appellant] suffer a diffuse axonal injury in the collision of August 12, 2010?"

[MPIC's doctor] replied on May 11, 2015,:

> "No, on the balance of probability and with a high degree of medical certainty, [the Appellant] did not sustain a diffuse axonal injury with the crash in question. The clinical context and the imaging findings indicate that this patient did not sustain diffuse axonal injury with the event in question." (Underlining added)

[MPIC's doctor] reported that the Appellant underwent a neuropsychological evaluation with [independent neuropsychologist #1] in January 2012. [Independent neuropsychologist #1] reviewed the Appellant's history and he did not demonstrate any obvious cognitive difficulties through his interactions with [independent neuropsychologist #1]. [MPIC's doctor] stated:

> "There is a subsequent neuropsychological evaluation by [independent neuropsychologist #1]. The patient had been followed up because of the diagnostic uncertainty of the first neuropsychological testing. The patient's difficulties with memory were worsening with time. It was noted that this would be inconsistent with the natural recovery from a traumatic brain injury. The patient had a clear decline in his cognitive performance since the previous evaluation. Previous mild decrements in verbal ability and executive cognitive functioning, revealed more profound deficits in terms of memory functioning. The patient's deficits were such that he would not be able to return to his employment. Spontaneous speech was diminished. He was more dependent on his wife. His ability to function independently had significantly declined over time. His memory was worsening. The patient's declining cognitive performance was not consistent with the natural course of recovery from a traumatic brain injury. The severity of the deficits would not be consistent with the nature and severity of the injury he did sustain. [Independent neuropsychologist] stated that in her opinion, it was improbable that the patient's current cognitive deficits were causally related to the injuries sustained in the accident of August of 2010. The source of the patient's difficulty remained unclear at that time." (Underlining added)

[MPIC's doctor] disagreed with [Appellant's neurologist's] impression that the Appellant sustained a mild traumatic brain injury as well as diffuse axonal injury. [MPIC's doctor] stated:

> "These are essentially mutually exclusive diagnoses. The clinical context of the patient with diffuse axonal injury is typically one in the Intensive Care Unit, requiring assisted ventilation, being significant (sic) impaired from a neurological perspective. A mild TBI is at the exact opposite end of the spectrum."

MPIC's legal counsel requested that [MPIC's doctor] respond to the following question:

> **"Do the results of the MRI of May 11, 2011 show that the patient had a diffuse axonal injury."**

[MPIC's doctor] stated on May 11, 2015:

> "No, on the balance of probability and with a high degree of medical certainty, the MRI of May 11, 2011 does not show the patient sustained diffuse axonal injury with the crash in question." (Underlining added)

[MPIC's doctor] further stated that [Appellant's neurologist's] correspondence of March 5, 2015 indicated that the Appellant's subsequent course had proven to be a progressive one with a diagnosis of dementia, with possible Lewy bodies. [MPIC's doctor] further stated:

> "Lewy body dementia is a difficult disease where individuals go through waxing and waning levels of confusion. It is a type of dementia, associated with physical signs similar to Parkinson's Disease. The condition deteriorates slowly over time, and is associated with a waxing and waning presentation. Drop attacks and falls with variable delusions and hallucinations are common in this condition. (Underlining added)
>
> [Appellant's neurologist] does not seem to examine the possibility that the patient's presentation was an early manifestation of his eventual diagnosis with Lewy body dementia."

[MPIC's doctor] also stated that:

1. The Appellant's MRI of January 15, 2013 did not document diffuse axonal injury and the Appellant's clinical picture is entirely inconsistent with that diagnosis.
2. On the balance of probability and with a high degree of medical certainty the motor vehicle accident did not cause the Appellant's subsequent blackouts, Lewy body dementia, current cognitive decline and/or his cerebral atrophy.
3. He disagreed with [Appellant's neurologist's] findings that the Appellant suffered from mild traumatic brain injury which best explained the acute changes and pattern recovery at that time.
4. He indicated that the Appellant's subsequent decline and significant psychological abnormalities were not consistent with a trajectory of mild traumatic brain injury.
5. He noted that [Appellant's neurologist] had stated that he was not even sure that the Appellant had sustained a concussion.

6. The Appellant's mental status had declined and then gradually improved and then declined again.
7. This is consistent with a neurodegenerative disease such as Lewy body dementia which is well known to cause waxing and waning changes in cognitive function, orientation and memory.

[MPIC's doctor] further stated that:

1. He disagreed with [Appellant's neurologist's] conclusion that the finding of cerebral atrophy could be due to a traumatic brain injury.
2. In this context this conclusion is incorrect since the Appellant did not sustain a probable mild traumatic brain injury and even if he had, [MPIC's doctor] stated that a mild traumatic brain injury does not lead to cerebral atrophy.
3. The cerebral atrophy is either due to aging or to a neurodegenerative disease, or both.

[Independent neuropsychologist #2's] report dated May 30, 2015:

MPIC's legal counsel requested that [independent neuropsychologist #2] respond to [Appellant's neurologist's] neurological report dated March 5, 2015. [Independent neuropsychologist #2] replied on May 30, 2015 and stated that she agreed:

1. with [Appellant's neurologist] that we cannot be certain that the Appellant sustained a concussion in the August 12, 2010 motor vehicle accident;
2. with [Appellant's neurologist] that blackouts are likely not an effect of the motor vehicle accident. [Appellant's neurologist] explains that syncope related to cardiac arrhythmia likely caused the motor vehicle accident;
3. with [Appellant's neurologist] that the Appellant is likely experiencing some form of dementia;

4. with [Appellant's neurologist] that they cannot link the collision to the Appellant's cognitive decline in 2012. [Appellant's neurologist] provides evidence of mental status improvements between March 2012 and July 2012. More extensive neuropsychological evaluation is 2012 and 2013 provide evidence of significant cognitive decline two to three years post-injury. Concussion does not typically lead to poor neuropsychological status. Recovery post-concussion frequently occurs within days to weeks and would not be associated with a decline in ability months or years post-injury.

[Independent neuropsychologist #2] further stated that she and [Appellant's neurologist] disagreed as follows:

1. [Appellant's neurologist's] report that the Appellant was experiencing anxiety, depressed mood and sleep disturbances in the month following the motor vehicle accident are inconsistent with the medical records that were provided for review. She did not see any reports of changes in mood, anxiety or sleep to suggest the Appellant was experiencing symptoms consistent with a post-traumatic disorder or a post-concussion syndrome.
2. (a) That there was evidence of memory impairment immediately after the motor vehicle accident. [Appellant's neurologist] reported that although there was no objective evidence that the Appellant had a decline in cognitive function in the first 6 weeks after the accident, there is nonetheless evidence of significant decline in memory immediately following the motor vehicle accident.

   (b) [Independent neuropsychologist #2] stated she understood that [Appellant's neurologist] based this opinion on the collateral report of the Appellant's wife and possibly the records from [Appellant's physiatrist], [independent neuropsychologist #1] and herself. There are some inconsistencies in the Appellant's wife's reports regarding the onset of memory problems. The collateral information gathered by

[independent neuropsychologist #1] in 2012 suggests memory deficits were not evident or reported right after the motor vehicle accident.

(c) [Appellant's neurologist] first assessed the Appellant in March 2011 at [Appellant's doctor #1's] request because of concerns about his memory. [Appellant's doctor #1] noted to [Appellant's neurologist] in October 2010 that he did not see earlier reports of memory concerns in the medical records.

[Independent neuropsychologist #2] noted that [MPIC's doctor] also disagreed with [Appellant's neurologist] as follows:

1. [Appellant's neurologist] reported other symptoms soon after the accident included dizziness, poor balance, irritability, and decreased tolerance or frustration in accordance with the reports of [Appellant's physiatrist] and [independent neuropsychologist #1]. However, [MPIC's doctor] indicates that these symptoms were not reported immediately after the motor vehicle accident but rather at the time of the assessments that were done by [Appellant's neurologist]. Symptoms expressed by the Appellant were not specific to his injury and do not provide evidence of a symptom profile that would be consistent with concussion.
2. [Appellant's neurologist] reported the Appellant's symptoms and profile fits a normal trajectory of recovery post-TBI and is consistent with the medical records. However, [MPIC's doctor] stated that it is also inconsistent with research and expectations of recovery post-injury.
3. [Appellant's neurologist's] evaluation that the Appellant indicated cognitive improvement between 2011 and 2012. [Appellant's neurologist's] recent report provides evidence of a progressive decline since 2012 and a diagnosis of possible dementia with Lewy bodies. However, [MPIC's doctor] agreed with [Appellant's neurologist's] opinion

and stated that said progressive cognitive decline with dementia is inconsistent with a trajectory of recovery post-concussion.

[Independent neuropsychologist #2] agreed with [Appellant's neurologist] that it was likely the Appellant had a neurodegenerative disorder leading to dementia. This latter factor is likely more contributory to the Appellant's cognitive symptoms as mild concussion does not lead to progressive cognitive decline.

[Independent neuropsychologist #2] also disagreed with [Appellant's neurologist's] statement that:

1. An acute decline in mental status with gradual improvement for a year or two fits the recovery from mild concussion.
2. A mild concussion contributed to the Appellant`s cognitive decline.

In her view she stated:

1. The vast majority of individuals with mild concussion recover within days to weeks following the concussion.
2. Multiple factors contribute to dementia later in life.
3. To her knowledge there was no evidence to link a single mild TBI to cognitive decline later in life.
4. The research does not support this and literature in this field is contrary to [Appellatn's neurologist's] speculation that in time we will discover that mild TBI contributes to dementia later in life.
5. The knowledge we have to date would indicate there are no prolonged cognitive or neuropsychological effects of concussion.

[Independent neuropsychologist #2] stated in summary:

> "... [the Appellant] sustained, at most, a mild TBI during the August 12, 2010 MVA. His cognitive status has deteriorated since 2012. I can relate neither the severity of his deficits nor the progressive decline to the August 12, 2010 MVA. I agree with [Appellant's neurologist] on several points, but I do not agree that the mild TBI likely contributed to his dementia. Although we do not know all factors that lead to cognitive decline later in life, the knowledge we have to date would not support mild TBI as a probable cause of dementia." (Underlining added)

Appeal Hearing:

Testimony of [Appellant's daughter]:

The Appellant's daughter, [text deleted], represented the Appellant at the hearing and provided a written statement to the Commission in which she stated that her father had been a hardworking man who prided himself on working well and rarely missed work in order to provide for his family. He had a very positive influence on [Appellant's daughter] and instilled a strong work ethic in her and was someone she could depend upon. She stated the Appellant was mechanically inclined and could fix most anything.

She further stated that:

1. Her father's odd behaviour began the day after the motor vehicle accident, including a loss of memory.
2. Her father's black-out occurred while he was riding the motor vehicle and resulted in the motor vehicle accident.
3. After the motor vehicle accident everything changed.
4. Her father's dignity and freedom were taken away from him.
5. Subsequent to the motor vehicle accident he blacked-out on several occasions and was no longer able to work which was extremely difficult for him to accept.

6. He was no longer able to drive a vehicle.
7. This loss of her father's freedom resulted in him feeling anxious and that he felt like a burden in that he had to depend upon other people helping him.
8. The Appellant, after the motor vehicle accident, had memory problems and needed reminding to take his medication and even to take a shower.
9. While her mother was in the hospital her father needed help in meals and laundry and being driven to see his wife and do the grocery shopping.
10. The Appellant gets frustrated because when he enters a room he can't remember why he went into the room and he is unable to do the mechanical repairs that he could do prior to the motor vehicle accident.
11. They spent four years trying to disprove her father's brain injury and it seems ridiculous to take the opinion of one doctor who spent no more than two hours with her father over the opinion of [Appellant's neurologist] who has been her father's neurologist since 2011.
12. The settlement received from MPIC was equivalent to one year's worth of annual salary and to receive a settlement like this for someone who lost everything and was subjected to a degrading process by MPIC was certainly not a settlement. It is shameful.

Her father's gradual decline occurred between January 2010 and December 2010.

She concluded her statement by stating that she wanted the Commission to do what is fair.

Testimony of [Appelant's wife]:

The Appellant's wife, [text deleted], testified that:

1. Her husband worked three jobs, had a grade [text deleted] special education, and worked at a [text deleted] for a period of 22 years as a labourer.
2. He was able to fix machines, was artistic, could crochet and was a handyman until the August 10, 2010 motor vehicle accident.
3. After that everything changed and she immediately noticed that he was having memory problems.
4. As a result, he saw [Appellant's doctor #1], his family doctor, who reported that he conducted a neurological examination which was normal.
5. [Appellant's doctor #1] referred the Appellant to see [Appellant's neurologist], a neurologist.
6. [Appellant's neurologist] reported that the Appellant had suffered a brain injury as a result of the motor vehicle accident.
7. She was critical of [independent neuropsychologist's] reports in respect of her husband. She disagreed with [independent neuropsychologist's] report that she was informed that after the motor vehicle accident there was not a significant change in her husband, on the contrary she asserted there was a substantial change in his conduct and in particular he was having memory problems.

Testimony of [Independent neuropsychologist #2]:

[Independent neuropsychologist #2] testified at the hearing and stated that she had experienced treating patients with concussion through mild traumatic brain injuries (TBI's), as well as patients with dementia and diffuse axonal injury. [Independent neuropsychologist #2] further testified that:

1. Usually concussions from mild TBI's have an immediate effect on the patient's level of consciousness. They are often dizzy, disoriented and may often exhibit short-term memory problems and usually resolve themselves within a 10 day period.
2. A patient with a concussion or mild TBI would not experience a deterioration of cognitive function over the long term, or experience lasting cognitive impairments.
3. Diffuse axonal injury relates to a patient who has a severe head trauma. These patients would be in a coma and if they survived they would experience profound or major cognitive problems. Diffuse axonal injury patients can experience an improvement in their cognitive function and then a plateau in cognitive function.
4. Dementia presents in patients in various forms but often a patient will get worse over time. A patient with vascular problems can experience small bleeds in the brain, which can often cause more and more cognitive difficulties.
5. Dementia is not usually related to a single instance of trauma. It is unlikely the Appellant's mild TBI or concussion would be causally related to any dementia.
6. A head injury leading to a concussion would not accelerate vascular dementia or increase the severity of the dementia. Concussions and vascular dementia are often unrelated conditions.

[Independent neuropsychologist #2] further testified that:

1. She met with the Appellant on September 17, 2013 and conducted a neuropsychological assessment which took about 8 hours. [Independent neuropsychologist #2] interviewed the Appellant and conducted testing on him. She reviewed the medical information on MPIC's file. [Independent neuropsychologist #2] reviewed [independent neuropsychologist #1's] reports, [Appellant's neurologist's] reports, and the two MRIs from March 2011 and January 2013.

2. In providing her report in preparation for the hearing she reviewed all the documents contained in the Commission's binder. She indicated that the new documents reviewed did not change her opinion.
3. She noted the Internal Review Officer's decision of February 25, 2014, wherein the Appellant's wife had informed the Internal Review Officer by telephone hearing that the Appellant was currently on medication, Aricept, which is provided to treat Alzheimer's or Parkinson's disease.
4. In response to a question from the Chairperson of the Commission, she indicated that the Appellant seems to have some form of dementia.
5. The Appellant was assessed immediately after the accident at the hospital and was found to have a Glasgow Coma Scale ("GCS") of 14/15 or 15/15. GCS scale is to measure a patient's level of consciousness after a head injury. A GCS of 13-15/15 is a mild TBI or concussion, a GCS of 9-12/15 is a moderate TBI, and a GCS of 3-8/15 is a severe TBI. These documents confirm that the Appellant suffered a concussion or a mild TBI as a result of the accident.
6. A report from [Appellant's doctor #1] shows that the Appellant had a normal neurological examination in September 2010. This finding is consistent in the normal progression of concussion symptoms and 3-4 weeks after the accident the symptoms associated with the concussion had been resolved.
7. [Appellant's neurologist] examined the MRI report in respect of the Appellant dated May 1, 2011. The MRI resulted from a referral by [Appellant's neurologist] and indicated that the clinical history of the Appellant indicated a significant head injury.
8. The description of this injury was inaccurate because the Appellant suffered a concussion or mild TBI.

9. It was significant there was no provisional diagnosis on the MRI and that [Appellant's neurologist] had not diagnosed the Appellant's condition at that point in time.
10. The MRI also noted there were two micro hemorrhages, small bleeds within the brain and indicated that these micro hemorrhages could be related to vascular problems and may not have been caused by the accident.
11. Diffuse axonal injury often show lesions around the brain and throughout the brain, rather than only two micro hemorrhages that were observed on the MRI.
12. The two micro hemorrhages did not show a brain with the usual presentation or signs of diffuse axonal injury.
13. Diffuse axonal injury is unlikely related to a concussion or mild TBI, because diffuse axonal injury is a much more severe injury.
14. [Independent neuropsychologist #2] reviewed the MRI from January 15, 2013 and testified that:
    a) This MRI is significant as the Appellant`s history now indicates a head injury and aneurysm rather than a significant head injury.
    b) She disagreed with [Appellant's neurologist's] opinion that as a result of the MRI he provided a provisional diagnosis which included diffuse axonal injury.
    c) In her view, [Appellant's neurologist's] diagnosis was in question and that an MRI does not diagnose diffuse axonal injury.
    d) The MRI for the first time identified the Appellant had diffuse cerebral atrophy.
    e) The MRI did not indicate that the radiologist reported no evidence of more diffuse axonal injury.
    f) The two micro hemorrhages were more likely to be of a vascular origin rather than arising from the Appellant's concussion.

[Independent neuropsychologist #2] further testified that:

1. She had reviewed three of [Appellant's neurologist's] reports. The first report is dated March 9, 2011, the second report is dated July 11, 2011 and the third report is dated November 15, 2011. These reports indicate that the Appellant's memory improved after the collision.
2. She had reviewed a report from [Appellant's psychiatrist], a psychiatrist, who examined the Appellant on April 11, 2012. In this report [Appellant's psychiatrist] had assessed the Appellant and indicated there was no evidence of a progressive decline in his cognitive function. [Independent neuropsychologist] felt that these comments were significant because they were consistent with the normal course of recovery after a patient suffered from a brain injury. These reports indicate the Appellant improved in the year 2011 and 2012.
3. She also identified that the test results as indicated in [Appellant's neurologist's] report of March 9, 2011 indicated that the Mini Mental State Evaluation ("MMSE") test result of March 2011 was 24/30, which she identified as borderline normal. However, in [Appellant's neurologist's] report of July 11, 2011 the test results improved from March to July 2011 when he scored a 26/30 on the MMSE. As well [Appellant's neurologist's] report of July 2012 again improved and the test result score was 27/30 on the MMSE.
4. The MMSE test is a good global indicator of a patient's cognitive function and it measures such things as a patient's memory and attention.
5. These scores showed that the Appellant was functioning at a normal level, especially following the test results of July 2011 and July 2012.
6. She disagreed with [Appellant's neurologist's] diagnosis of diffuse axonal injury as indicated in his reports dated July 11, 2011, August 8, 2011 and November 15, 2011

because of the Appellant`s normal condition immediately after and for several weeks following the accident which is inconsistent with a finding of diffuse axonal injury.

7. She agreed that the improvement in memory was consistent with a mild concussion and not a diffuse axonal injury.

She further testified that:

1. [Appellant's neurologist], in his report of November 15, 2011, stated that the Appellant suffered from widespread and bilateral micro hemorrhages as a basis for the diagnosis of diffuse axonal injury.
2. She disagreed with this diagnosis and indicated that the MRI indicated only two micro hemorrhages.
3. Diffuse axonal injury normally shows more widespread lesions throughout the brain.
4. [Appellant's neurologist] indicated the Appellant had a mild cognitive impairment in March 2011 to which she agreed.
5. She further indicated that the Appellant's MMSE had improved between March 2011 and July 2012 when the test results indicated that there was a normal score of MMSE taking into consideration the Appellant's grade [text deleted] education.

[Independent neuropsychologist #2] also commented in her testimony on the January 27, 2012 and November 16, 2012 reports of [independent neuropsychologist #1]. She testified that:

1. These reports showed a decline in the Appellant's cognitive functioning between January 2012 and November 2012.
2. She explained that [independent neuropsychologist #1's] comments that the Appellant's deficits were consistent with vascular etiology related to the Appellant's aortic aneurysm and the two micro hemorrhages indentified in the MRIs.

3. Between the dates of the two reports from [independent neuropsychologist] dated January 27, 2012 and November 16, 2012 a decline in the Appellant's test results was reported.
4. This decline was significant as there is no indication there is some improvement of test results due to the learning process.
5. She confirmed that in November 2012 the Appellant suffered a severe decline in cognitive function.

[Independent neuropsychologist #2], in her report of October 9, 2013, commented on the interview she had with the Appellant and the tests that she conducted at that time. She testified that:

1. These test results showed that the Appellant performed at an extremely low range on many tests.
2. The results of these tests show that he had experienced a significant decline in cognitive function from the two prior neuropsychological assessments.
3. After reviewing the entire Appellant's medical file, the Appellant's condition seemed to be improving until mid-2012.
4. After mid-2012 the Appellant's cognitive function began to decline.

[Independent neuropsychologist #2] confirmed in her testimony that the Appellant had suffered from a mild TBI in August 2010 and this current condition and severe decline in cognitive function was not related to that mild TBI. She further testified that:

1. The Appellant's condition was not in line with the normal progression of concussion-related symptoms that he suffered a decline after mid-2012.

2. The Appellant's condition was consistent with the normal progression of concussion related symptoms until mid-2012 and he had shown improvement up to that time but after that period of time there was a decline in cognitive condition.
3. She was uncertain about the cause of the Appellant's dementia and his cognitive decline that started in mid 2012.
4. The etiology of the Appellant's cognitive decline is unknown and her impression is that his cognitive decline is unlikely to be related to the injury he suffered in the August 12, 2010 motor vehicle accident.
5. She could not attest to the severity of his impairments, nor the decline in his abilities over time due to a mild TBI he sustained in the motor vehicle accident.
6. The Appellant did sustain a mild TBI due to the motor vehicle accident and the Appellant's cognitive decline is unlikely due to the motor vehicle accident of August 10, 2010.
7. Mild TBI's do not get worse over a period of time.
8. The kind of mild concussion the Appellant had could not explain his current cognitive decline.

MPIC's Submission:

In his submission, MPIC's legal counsel reviewed all the medical and documentary evidence on file and submitted that the Appellant had failed to establish on a balance of probabilities that there was a causal relationship between the Appellant's motor vehicle accident of August 12, 2010 and the Appellant's serious and ongoing deterioration of his cognitive functions.

MPIC's legal counsel submitted that the Appellant's cognitive deficits and deterioration were caused by Lewy Body dementia and cerebral atrophy. These conditions were not caused by the

motor vehicle accident. The Appellant did not have diffuse axonal injury. and MPIC's legal counsel indicated the four periods of time in which we should examine the Appellant's symptoms. The date of the first period was from the date of the motor vehicle accident for a period of six weeks to October 2010. During this time there are no cognitive deficits or deterioration of the Appellant. The second period is October 2010 to March 2011 where concerns were raised about the Appellant's cognitive function and memory. The third period is from March 2011 to mid 2012 where there was improvement in cognitive function ("near normal"). The fourth period is from mid 2012 to the present.

During the first six weeks following the motor vehicle accident, up to October 10, 2011, the clinical history in respect of the Appellant's condition following the motor vehicle accident demonstrated there were no objective events of cognitive decline. However, the Appellant's wife had the mistaken belief that the Appellant's condition occurred immediately after the motor vehicle accident.

MPIC's legal counsel referred to the period of August 10, 2010 to March 11, 2011 and stated that:

1. The first reference of a loss in memory was [Appellant's doctor #1's] report of October 7, 2010 which referenced the Appellant's forgetfulness.
2. The Appellant's wife did not worry about the Appellant's conduct until after December 10, 2010 when he was having hallucinations.
3. [Appellant's neurologist's] report of March 9, 2011 indicated that the Appellant's wife reported that the Appellant was not his normal self and he had memory problems.
4. The several tests conducted by [Appellant's neurologist] concluded, in error, that as a result of the motor vehicle accident the Appellant suffered a diffuse axonal brain injury.

5. [Independent neuropsychologist #2's] report of January 27, 2012 indicated that the Appellant's wife stated that after the motor vehicle accident the Appellant was generally like his normal self which was contrary to what she had reported to [Appellant's neurologist].
6. [Independent neuropsychologist #2] determined, having regard to the Appellant's clinical history following the motor vehicle accident, that any injuries suffered by the Appellant could not have caused the Appellant's subsequent cognitive deterioration.
7. [Independent neuropsychologist #2] and [MPIC's doctor] concurred with [Independent neuropsychologist #1's] opinion.

MPIC's legal counsel referred to [Appellant's neurologist's] report of March 5, 2015 wherein [Appellant's neurologist] indicated that although there was no objective evidence the Appellant had a decline in cognitive functions in the first weeks after the motor vehicle accident he could not be certain the Appellant sustained a concussion as a result of the motor vehicle accident. [Appellant's neurologist], in error, subsequently concluded that the Appellant's mild concussion contributed to the Appellant subsequently suffering from dementia.

MPIC's legal counsel further submitted that:

1. [Independent neuropsychologist #2] and [MPIC's doctor] who both disagreed with [Appellant's neurologist's] diagnosis that the Appellant suffered a diffuse axonal brain injury.
2. [Independent neuropsychologist #2] stated that diffuse axonal brain injury would probably result in the Appellant being in a coma.
3. [MPIC's doctor] stated in his May 11, 2015 report that a patient with diffuse axonal brain injury is usually in a dense form of unconsciousness such as a persistent vegetative state

and that the only injuries the Appellant suffered as a result of the motor vehicle accident were fractured ribs, lung contusion and other multiple conditions.

MPIC's legal counsel also submitted:

1. [Appellant's neurologist] subsequently reported that the Appellant's dementia was caused by the motor vehicle accident.
2. [MPIC's doctor] and [Independent neuropsychologist #2] both disagreed with [Appellant's neurologist's] diagnosis that the Appellant's dementia was caused by the motor vehicle accident.
3. [Independent neuropsychologist #2] stated that the Appellant's cognitive deficits and deterioration are caused by Lewy Body dementia and cerebral atrophy and these cognitive deficits were not caused by the motor vehicle accident.

MPIC's legal counsel therefore submitted that:

1. The Commission should reject [Appellant's neurologist's] opinion that as a result of the motor vehicle accident the Appellant suffered from diffuse axonal brain injury, dementia and cerebral atrophy.
2. The Commission should accept the opinions of [Independent neuropsychologist #1], [MPIC's doctor] and [Independent neuropsychologist #2] that any injuries the Appellant sustained in the motor vehicle accident did not result in the Appellant suffering from diffuse axonal brain injury, dementia or cerebral atrophy.

[Appellant's wife] Submission:

The Appellant's wife submitted:

1. As a result of the motor vehicle accident there was an immediate change in the personality and memory of the Appellant and he was not the same person as he was prior to the motor vehicle accident.
2. He had a significant loss of memory and there was a substantial change in his personality.
3. She disagreed with [Independent neuropsychologist #1] and she had advised [Independent neuropsychologist #1] that the Appellant had not suffered any significant change in his conduct right after the motor vehicle accident.
4. She disagreed with [Independent neuropsychologist #1's] report in this respect. She also stated that the reports of [Appellant's neurologist], who had been treating the Appellant over a period of time and was familiar with his history, should be accepted in respect of the Appellant and reject those of [MPIC's doctor] and [Independent neuropsychologist #2] who had not seen him at all or seen him for a short period of time before providing their reports.

DISCUSSION:

Appellant's Medical File Following the Motor Vehicle Accident

The Appellant was involved in a motor vehicle accident on August 12, 2010. An examination of the ambulance report indicates the Appellant was conscious when the paramedics arrived approximately 25 minutes after the motor vehicle accident. The paramedic report indicated:

1. No loss of consciousness was reported by the Appellant or by other witnesses to the accident.
2. The Appellant was alert, his pupils were equal and reactive to light and was not reporting any symptoms of headache, dizziness or nausea.
3. His GCS was 14/15.

4. When he was transported to the hospital it was noted the Appellant was confused with no recall of the motor vehicle accident or the events leading up to the accident.
5. The Emergency Room records indicated that when the Appellant was examined he was alert and fully oriented.

A neurological examination performed at that time was normal and the CT imaging of his brain revealed no evidence of intra or axial hemorrhage, infarct or mass. As a result of the motor vehicle accident the Appellant sustained a traumatic injury of left rib fracture, lung contusion and nasal fracture. The Appellant was discharged from the hospital the same day.

An Application for Compensation was made by the Appellant on August 18, 2010. The Appellant set out the injuries sustained in the motor vehicle accident as two broken ribs, bruised lung, broken nose, loss of consciousness (retrograde amnesia), back pain, small cut under nose, bruising to left and right chest, bruising left index and outside elbow, cut to right shin, and facial bruising near chin.

The Primary Health Report completed by the Appellant's doctor, [Appellant's doctor #1], dated September 6, 2010 indicated that he presented with pain due to his fractured ribs, pulmonary contusion and soft tissue injuries. [Appellant's doctor's] report did not note any cognitive symptoms. The neurological examination performed by him at that time was reported as normal.

The Appellant saw a chiropractor approximately one month after the motor vehicle accident with complaints of mid-back pain, low-back pain and there were no findings related to concussion and the Appellant`s neurological examination was normal. There was no diagnosis made of a problem with concussion.

There was also a physiotherapy report which evaluated the Appellant in terms of impairment. This report did not identify findings consistent with a diagnosis of concussion.

The Commission finds that the significance of the Appellant's medical history following the motor vehicle accident is central in determining whether or not the motor vehicle accident caused the Appellant to suffer from a diffuse axonal brain injury, dementia, and cerebral atrophy. [Appellant's neurologist], the Appellant's neurologist, concluded based on his acceptance of the Appellant's wife's history of the Appellant's conduct following the motor vehicle accident and the tests he conducted, that the motor vehicle accident caused the Appellant to suffer from the cognitive deficits of diffuse axonal injury, dementia and cerebral atrophy.

[Independent neuropsychologist #1], [MPIC's doctor] and [Independent neuropsychologist #2] determined that there was no objective evidence based on the medical history following the motor vehicle accident and rejected the recollection from the Appellant's wife of the Appellant's conduct following the motor vehicle accident and her account that the accident caused the deficits.

The Commission notes when a physician obtains a correct history from a patient the result will probably be a correct diagnosis. However, where a physician obtains a faulty history from the Appellant the result will be a faulty diagnosis.

The Appellant`s wife testified at the hearing and stated that immediately following the motor vehicle accident there was a substantial change in the Appellant`s conduct and she noticed that he was having memory problems.

[Appellant's neurologist] first saw the Appellant on March 9, 2011, a period of seven months after the motor vehicle accident and therefore did not have an opportunity of personally assessing the Appellant shortly after the motor vehicle accident. During that meeting [Appellant's neurologist] obtained a history of the Appellant's symptoms subsequent to the motor vehicle accident and stated in his report:

> "His wife feels that the memory was markedly affected after the MVA. Since the thoracic surgery he has gradually been getting better, memory has been improving. He has not gone back to work since the blackout but is functioning almost as usual at home. He has gone out shopping alone on occason (sic)." (Underlining added)

The Commission finds that [Appellant's neurologist], was in error, in that he did not appear to give any or sufficient weight to the Appellant's medical history following the motor vehicle accident and as a result accepted the Appellant`s wife`s record of the history of the Appellant`s conduct following the motor vehicle accident. The Commission determines that the Appellant's medical history following the motor vehicle accident did not indicate that the Appellant suffered a significant brain injury, but did suffer a mild concussion which lasted for a few weeks. The Commission determines that during that period of time the Appellant did not suffer any cognitive deficits and was his normal self.

Following the Appellant`s wife`s concerns about the Appellant`s memory after the motor vehicle accident, [Appellant's neurologist] conducted a series of standardized tests and determined there was evidence of the Appellant's impaired memory. This finding of the Appellant`s impaired memory is consistent with the Appellant`s wife`s report to him that the Appellant`s memory was markedly affected after the motor vehicle accident. Pursuant to the concerns raised by the Appellant`s wife, [Appellant's neurologist] referred the Appellant for an MRI scan which occurred on May 1, 2011, approximately 7½ months after the motor vehicle accident. The MRI

showed two micro hemorrhages. [Appellant's neurologist's] diagnosis based on the MRI was that the Appellant was suffering from a diffuse axonal brain injury. A second MRI conducted on January 15, 2013 confirmed [Appellant's neurologist's] diagnosis that the two micro hemorrhages suggested a diffuse axonal brain injury. The Commission finds that [Independent neuropsychologist #2] determined [Appellant's neurologist] mis-diagnosed the result of the MRI in suggesting that the Appellant suffered a diffuse axonal brain injury.

On October 29, 2012 [Appellant's neurologist] reported the results of an EEG which demonstrated a diffuse abnormality and that the MRI scan demonstrated changes quite consistent with diffuse axonal injury. It was [Appellant's neurologist's] impression that the evidence points to a brain injury resulting from the accident in question.

[Appellant's neurologist] requested [Independent neuropsychologist #1], a neuropsychologist, to conduct an assessment of the Appellant which was carried out on January 27, 2012 a period of approximately 17 months after the motor vehicle accident.

After reviewing the Appellant's medical records and history, [Independent neuropsychologist #1] disagreed with [Appellant's neurologist's] assessment that the Appellant's cognitive deficits were a result of the motor vehicle accident. Contrary to the Appellant's wife's statements to [Appellant's neurologist] about the radical change in the Appellant's cognitive function following the motor vehicle accident, the Appellant's wife informed [Independent neuropsychologist #1] that following the motor vehicle accident the Appellant appeared to be his normal self.

The Commission notes that the Appellant's wife's report to [Independent neuropsychologist #1] of her husband's normal self immediately after the motor vehicle accident is inconsistent with the report to [Appellant's neurologist] on March 9, 2011, a period of seven months after the motor vehicle accident, that the Appellant was not his normal self following the motor vehicle accident.

The first reference of the Appellant's loss of memory is set out in [Appellant's doctor's] report of October 7, 2010 noting the Appellant's forgetfulness. The Commission notes that the Appellant's wife did not worry about the Appellant's conduct until after December 10, 2010, a period of four months after the motor vehicle accident when she reported to [Appellant's doctor] that the Appellant was having hallucinations. The Appellant's wife's conduct in this respect is consistent with [Independent neuropsychologist #1's] report that the Appellant's wife did not advise her that the Appellant was not his normal self immediately following the motor vehicle accident.

[Independent neuropsychologist #1] correctly concluded that:

1. Contrary to the Appellant's wife's statements to [Appellant's neurologist], the Appellant exhibited some mild decrements in verbal memory and executive cognitive functioning.
2. It was unlikely that the motor vehicle accident would be a contributing factor to any present deficits.
3. Based on the Appellant's medical records and the Appellant's wife's reported history following the motor vehicle accident, it did not appear that he experienced a clear loss of consciousness as a result of the accident.

[Independent neuropsychologist #1] stated:

> "Consistent with this, [Appellant's doctor's] report dated September 6, 2010 indicates that [the Appellant's] neurological examination was normal at that time, with no observed cognitive concerns. This would also be consistent with the information provided by both [the Appellant] and [the Appellant's wife] in interview, whereby few cognitive concerns were noted immediately following the accident. Thus, in my opinion, if [the Appellant] is exhibiting any cognitive difficulties, on the balance of probability, this would not be related to the injuries he sustained in the motor vehicle accident." (Underlining added)

The Appellant's wife, in her testimony to the Commission, sharply disagreed with [Independent neuropsychologist #1's] report about the Appellant's conduct after the motor vehicle accident and insisted that after the motor vehicle accident the Appellant was not his normal self.

The Appellant's wife testified at the hearing before the Commission on August 13, 2015, a period of 5 years after the motor vehicle accident and a period of 3½ years after the meeting with [Independent neuropsychologist #1] on January 27, 2012. The Appellant's wife did not have any written notes when she attended before the Commission to testify and she was relying solely on her memory following the events that took place at the meeting of January 27, 2012, a period of 17 months following the motor vehicle accident.

On the other hand, [Independent neuropsychologist #1's] written report of her meeting with the Appellant and his wife on January 27, 2012, relating to the Appellant's conduct following the motor vehicle accident was prepared on the same date as the meeting. The Commission further notes that in her report [Independent neuropsychologist #1] relied on the written medical history of the Appellant's condition following the motor vehicle accident which corroborated her report that the Appellant was his normal self for several weeks following the motor vehicle accident.

The Commission notes that the Appellant's daughter testified at the hearing and confirmed her mother's statements that the Appellant was not his normal self following the motor vehicle accident. It is clear from the testimony of both the Appellant's wife and daughter that the events following the motor vehicle accident were extremely stressful to both of them. They testified to these events years after the motor vehicle accident occurred and relied solely on their memory in recalling these events.

The Commission finds that the evidence before the Commission rebuts the recollections of the Appellant's wife and daughter as to the Appellant's condition following the motor vehicle accident. In these circumstances, the Commission gives greater weight to the written report of [Independent neuropsychologist #1] than it does to the testimony and submissions of the Appellant's wife and daughter concerning the Appellant's condition following the motor vehicle accident that the Appellant was not his normal self. The Commission concludes that although there was no intention to deceive on the part of the Appellant's wife and daughter that their recollections of the Appellant not being his normal self after the motor vehicle accident was faulty.

The Commission agrees with [Independent neuropsychologist #1's] assessment that:

1. Having regard to the clinical history following the motor vehicle accident and the Appellant's wife's statements to her that the Appellant was his normal self following the motor vehicle accident.
2. The Appellant had a few cognitive concerns following the motor vehicle accident.
3. On a balance of probabilities the Appellant's cognitive difficulties could not be related to the injuries he sustained in the motor vehicle accident.

[Independent neuropsychologist #1] rejected [Appellant's neurologist's] diagnosis that the Appellant's injuries in the motor vehicle accident caused the Appellant's cognitive difficulties. [Independent neuropsychologist #2] and [MPIC's doctor] agreed with [Independent neuropsychologist #1's] assessment.

[Appellant's neurologist] provided a report to the Commission dated March 5, 2015 in which he stated that he could not be certain that the Appellant had sustained a concussion in the accident since there was no objective evidence the Appellant had a decline in cognitive functions in the first six weeks after the motor vehicle accident. The Commission notes this is a significant change from [Appellant's neurologist's] diagnosis in his report of November 15, 2011 wherein he stated the Appellant sustained a significant brain injury resulting in a diffuse axonal injury in the immediate period following the motor vehicle accident.

Although [Appellant's neurologist] ultimately agreed that as a result of the motor vehicle accident the Appellant suffered a concussion and there was no decline in the Appellant's cognitive functions in the first six weeks following the motor vehicle accident, he still maintained the Appellant's mild concussion was a factor to his cognitive impairment. [Appellant's neurologist] speculates:

> "An issue that likely will become of increasing importance is the growing body of literature that indicates that a solitary TBI can cause a cascade of events that leads to progressive degenerative dementia. A solitary moderate TBI has already become an accepted risk factor for Alzheimer's disease. In light of this information, the delayed onset of a degenerative dementia may be the result of the TBI and not proof that there was no brain injury at all."

[MPIC's doctor], like [Independent neuropsychologist #1], and [Independent neuropsychologist #2] determined, after reviewing the medical history of the Appellant following the motor vehicle accident, that there was no objective evidence to conclude that any injuries the Appellant

suffered as a result of the motor vehicle accident caused the Appellant's cognitive decline and his dementia. [MPIC's doctor] determined that there was no evidence the Appellant sustained a concussion as a result of the motor vehicle accident but the if the Appellant did sustain a concussion, it would have resolved itself within a few weeks following the motor vehicle accident. On the other hand, [Independent neuropsychologist #2] determined the motor vehicle accident caused the Appellant to sustain a concussion, but in the normal course the Appellant's concussion would have resolved itself within several weeks following the motor vehicle accident.

[MPIC's doctor] in his report dated May 11, 2015 disagreed with [Appellant's neurologist] that the motor vehicle accident could cause the Appellant to suffer from a diffuse axonal injury and stated:

> "At this time, the patient was not diagnosed with a probable concussion, and there was no evidence of diffuse axonal injury. There was no diagnosis related to central nervous system impairment. Patients with diffuse axonal injury are usually in a dense form of unconsciousness, such a (sic) persistent vegetative state." (Underlining added)
> ...
>
> "... [O]n the balance of probability and with a high degree of medical certainty, the MRI of May 11, 2011 does not show the patient sustained diffuse axonal injury with the crash in question." (Underlining added)

Further, [MPIC's doctor] disagreed with [Appellant's neurologist's] impression that the Appellant sustained a mild traumatic brain injury as well as diffuse axonal injury. He stated:

1. "These are essentially mutually exclusive diagnoses. The clinical context of the patient with diffuse axonal injury is typically one in the Intensive Care Unit, requiring assisted ventilation, being significant (sic) impaired from a neurological perspective. A mild TBI is at the exact opposite end of the spectrum."

2. That he determined the Appellant's medical history did not disclose that the Appellant suffered a concussion as a result of the motor vehicle accident.

3. If the Appellant did suffer a concussion than the concussion would have been resolved within several weeks after the motor vehicle accident.

In her testimony, [Independent neuropsychologist #2], like [MPIC's doctor] disagreed with [Appellant's neurologist's] diagnosis that the Appellant sustained a diffuse axonal brain injury as a result of the motor vehicle accident and stated:

1. A diffuse axonal brain injury relates to a patient who has a severe head trauma.
2. These patients would be a coma and if they survived they would experience profound or major cognitive problems.
3. The Appellant suffered from a mild concussion which would usually resolve itself in a short period of time which was the case for the Appellant.
4. Since the Appellant had not suffered a severe head trauma, the mild concussion could not have caused him to suffer from a diffuse axonal brain injury.
5. She disagreed with [Appellant's neurologist's] interpretation of the MRI report which indicated the Appellant was suffering from a diffuse brain axonal injury.
6. The MRI indicated two micro hemorrhages or small lesions within the brain.
7. Diffuse axonal injury will often show lesions on the brain and throughout the brain rather than only two micro hemorrhages as observed by [Appellant's neurologist] on the MRI.
8. An MRI does not diagnose diffuse axonal injury and she questioned [Appellant's neurologist's] interpretation of the MRI in providing a provisional diagnosis which included diffuse axonal brain injury.
9. She disagreed with [Appellant's neurologist's] diagnosis of diffuse axonal brain injury because the Appellant's condition immediately after and for several weeks following the accident improved.

10. The improvement in memory was consistent with a mild concussion and not a diffuse axonal brain injury.

[Independent neuropsychologist #2] further stated:

1. The Appellant's symptoms and profile fit the normal trajectory of recovery post-concussion and are consistent with the Appellant's medical history and inconsistent with [Appellant's neurologist's] findings at that time.
2. She disagreed with [Appellant's neurologist's] opinion that the Appellant's mild concussion contributed to the Appellant's cognitive decline.
3. She stated that to her knowledge there is no evidence to link a single mild concussion to cognitive decline later in life.

MPIC's legal counsel, in his submission indicated the four periods of time under which the Appellant's symptoms should be examined. The date of the first period was from the date of the motor vehicle accident for a period of six weeks to October 2010. During this time there are no cognitive deficits or deterioration of the Appellant. The second period is October 2010 to March 2011 where concerns were raised about the Appellant's cognitive function and memory. The third period is from March 2011 to mid 2012 where there was improvement in cognitive function ("near normal"). The fourth period is from mid 2012 to the present.

[Independent neuropsychologist #2] conducted a neuropsychological assessment of the Appellant at MPIC's request. In her report of October 9, 2013 she disagrees with [Appellant's neurologist's] assessment that the mild traumatic brain injury the Appellant sustained as a result of the motor vehicle accident could have caused the significant decline in the Appellant's changes two years after the motor vehicle accident. [Independent neuropsychologist #2]

concluded that she could not determine the factors that caused the Appellant's decline but was satisfied the Appellant's decline is unlikely related to his injuries he suffered as a result of the motor vehicle accident.

In her testimony, [Independent neuropsychologist #2] disagreed with [Appellant's neurologist's) diagnosis that the Appellant's dementia was caused by the motor vehicle accident and stated:

1. It was her impression that the cognitive decline and dementia which started in mid 2012 was unlikely to be related to the injury suffered by the Appellant in the motor vehicle accident.
2. Like [MPIC's doctor], she determined that the motor vehicle accident injuries did not cause the Appellant's dementia.
3. [Appellant's neurologist's] evaluation of the Appellant demonstrated the cognitive impairments improved between 2011 and 2012, but [Appellant's neurologist's] recent reports provided evidence of a progressive decline since 2012 with a diagnosis of dementia with Lewy Bodies.
4. [Appellant's neurologist's] opinion that the Appellant's mild concussion contributed to the Appellant's cognitive decline and to her knowledge there was no evidence to link a single mild concussion to a cognitive decline in later life.
5. Dementia is not related to a single instance of trauma and therefore it is unlikely that the Appellant's mild concussion could be causally related to the dementia since concussion and vascular dementia are often unrelated conditions.

[MPIC's doctor], in his report of May 11, 2015:

1. Disagreed with [Appellant's neurologist's] conclusion that the finding of cerebral atrophy could be due to a traumatic brain injury.

2. Stated that cerebral atrophy is either due to aging or to a neurodegenerative disease or both.
3. Disagreed with [Appellant's neurologist's] conclusion that the finding of cerebral atrophy could be due to a traumatic brain injury.
4. Cerebral atrophy is either due to aging or to a neurodegenerative disease or both.

[MPIC's doctor] concluded that any injuries the Appellant sustained in the motor vehicle accident did not cause the Appellant to suffer from dementia or cerebral atrophy.

Decision:

The Commission finds:

1. That the Appellant has failed to establish on a balance of probabilities that the motor vehicle accident caused the Appellant to suffer from a diffuse axonal brain injury, dementia or cerebral atrophy.
2. [Appellant's neurologist] erred in his diagnosis on relying on a faulty history provided by the Appellant's wife in respect of the Appellant's behaviour after the motor vehicle accident and ignored the Appellant's medical history following the motor vehicle accident which did not demonstrate the Appellant suffered from injuries which would cause a diffuse axonal brain injury, dementia, or cerebral atrophy.
3. By relying on a faulty history of the Appellant's behaviour following the motor vehicle accident [Appellant's neurologist] erred in providing a faulty diagnosis which indicated that the Appellant sustained a diffuse axonal brain injury, dementia or cerebral atrophy as a result of the motor vehicle accident.
4. [MPIC's doctor] and [Independent neuropsychologist #2] relied on the accurate medical history provided by the Appellant's wife to [Independent neuropsychologist #1] and, after

reviewing the Appellant's clinical history following the motor vehicle accident, concluded that any injuries the Appellant suffered in the motor vehicle accident could not have contributed to the Appellant suffering from a diffuse axonal brain injury, dementia or cerebral atrophy.

The Commission agrees with [Independent neuropsychologist #2] and determines that:

1. [Appellant's neurologist] erred in mis-interpreting the MRI results when he determined the MRI indicated the Appellant was suffering from widespread bilateral micro hemorrhages as the basis for his diagnosis of diffuse axonal brain injury.
2. The MRI indicated two small micro hemorrhages whereas a diffuse axonal brain injury often shows lesions throughout the brain, in respect of which [Independent neuropsychologist #2] stated that diffuse axonal brain injuries are unlikely related to a concussion and are from a much more severe injury which the Appellant did not sustain.
3. A diffuse axonal brain injury relates to a patient who has severe head trauma and this was not the case in respect of the Appellant.
4. A patient diagnosed with a diffuse axonal brain injury would be in a coma following a motor vehicle accident and if they survived they would experience profound cognitive problems following the motor vehicle accident. Following the motor vehicle accident the Appellant was not in a coma and did not suffer profound cognitive problems.
5. Patients with diffuse axonal brain injury would be in a dense form of unconsciousness such as a persistent vegetative state which was not the case in respect of the Appellant.

The Commission notes the Appellant, following the motor vehicle accident, was diagnosed with fractured ribs, pulmonary contusion or other multiple contusions and was not at that time diagnosed with a significant brain injury. The Appellant may have suffered from a mild

concussion which the Commission finds would have resolved itself in a few weeks following the motor vehicle accident.

[Appellant's neurologist] initially concluded that the Appellant suffered from a significant brain injury as a result of the motor vehicle accident but subsequently changed his diagnosis to that of a slight concussion resulting from the motor vehicle accident which was consistent with the opinion of [Independent neuropsychologist #2]. However, [Appellant's neurologist] concluded, contrary to the opinions of [Independent neuropsychologist #2] and [MPIC's doctor], that the Appellant's concussion which would normally resolve itself within several weeks contributed to the Appellant's dementia.

The Commission finds that:

1. There were no cognitive deficits or deterioration of the Appellant from the date of the motor vehicle accident for a period of six weeks to October 2010. In the period between October 2010 and March 2011 there were concerns raised about the Appellant's cognitive functioning and memory.
2. In the period from March 2011 to mid-2012 there was a significant deterioration in the Appellant's cognitive function.
3. The evolution of the Appellant's dementia developed after a significant period of time following October 2010.

The Commission:

1. Agrees with the submission of MPIC's legal counsel that the Appellant's cognitive deficits and deterioration were probably caused by Lewy Body dementia and cerebral atrophy and these conditions were not caused by the motor vehicle accident.

2. Agrees with the opinion of [Independent neuropsychologist #2] that dementia could not be caused by a blow to the Appellant's brain as a result of the motor vehicle accident.
3. Finds that [Appellant's neurologist] was in error in finding that there was a causal connection between the motor vehicle accident and the Appellant's dementia.

The Commission further agrees:

1. With the opinions of [Independent neuropsychologist #2] and [MPIC's doctor] that although there was no causal relationship between the motor vehicle accident and the Appellant's dementia, they were not certain as to what factors ultimately caused the Appellant's dementia.
2. With the opinions of [Independent neuropsychologist #1], [MPIC's doctor] and [Independent neuropsychologist #2] that any injuries the Appellant may have suffered as a result of the motor vehicle accident did not cause the Appellant to sustain a diffuse axonal brain injury and that the Appellant's dementia and cerebral atrophy were not caused by the motor vehicle accident. The Commission therefore finds that the Appellant's dementia and cerebral atrophy were not caused by the motor vehicle accident.

For these reasons, the Commission therefore finds the Appellant failed to establish on a balance of probabilities that the Appellant sustained any permanent cognitive deficits, such as diffuse axonal brain injury, dementia and cerebral atrophy, that were caused by the motor vehicle accident.

The Commission dismisses the Appellant's appeal and confirms the decision of the Internal Review Officer of February 25, 2014.

Dated at Winnipeg this 29th day of October, 2015.

MEL MYERS, Q.C.

DR. SHELDON CLAMAN

JANET FROHLICH