THE ROLE OF MEDICAL EVIDENCE IN DETERMINING WHETHER A BRAIN INJURY IS "CATASTROPHIC"

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More than a decade after reference to a Glasgow Coma Scale score of nine points or less was first introduced as a basis for entitlement to enhanced levels of statutory accident benefits in Ontario, remarkably little useful direction has been provided by the Courts or the Financial Services Commission regarding the interpretative issues surrounding this threshold.

Under the 1994 *Statutory Accident Benefits Schedule*, increased monthly attendant care limits were available to those who suffered "severe brain injuries that cause violent behaviour that may result in physical harm to the insured person or other persons" (section 47(7)). Instead of being limited to $3000 per month, individuals who met this definition could have sought up to $10,000 per month with no lifetime overall limit.

"Severe brain injuries" were then defined as those which caused, "within a reasonable period of time after the accident, the person" to "score nine points or less on the Glasgow Coma Scale as published in *Management of Head Injuries*, Contemporary Neurology series, Volume 20 (F.A. Davis Company 1981)" (section 47(8)).

There are no cases interpreting section 47(8) of the 1994 *Schedule*.

The significance of a score of nine or under on the Glasgow Coma Scale "according to a test administered within a reasonable period of time after the accident by a person trained for that purpose" became more pronounced under the 1996 *Statutory Accident Benefits Schedule*. Under this regime, a Glasgow Coma Scale reading of nine or less, resulting from a "brain impairment" and obtained under the circumstance as described above, is one basis upon which an insured person can obtain a designation of "catastrophic impairment" which in turn allows them to access significantly enhanced medical and rehabilitation, attendant care and case management benefits (sections 2(1.1)(e)(i) and 2(1.2)(e)(i)). By way of example, standard coverages for medical and rehabilitation services increase from an aggregate total of $100,000 to $1,000,000 in the case of a catastrophic impairment; attendant care limits increase from $72,000 available for a period of two years, to a lifetime limit of $1,000,000.

While the amendments to the *Schedule* which took effect on October 1, 2003 modified this threshold as it applied to children, they did not otherwise alter the wording of this definition of "catastrophic impairment" in the context of statutory accident benefits coverage.

Thus, the significance of the interpretation of this definition of catastrophic impairment has profound implications for people who have been seriously injured in automobile accidents in Ontario and the insurance industry alike.

While the language adopted by the drafters of the legislation appears initially straightforward, those familiar with the clinical use of the Glasgow Coma Scale immediately recognized a minefield of potential interpretive issues that would arise in applying this definition of catastrophic impairment".

Crudely, these issues can be summarized as the "who, what and when" of a given Glasgow Coma Scale reading, as applied to a particular patient.

The "who" refers to the "person trained for that purpose", described in the test. While the Glasgow Coma Scale reading is employed by paramedics, nurses and physicians, questions have arisen in cases where there are numerous different readings taken by different health care professionals in close temporal proximity to one another. Is a reading taken by a neurologist in an emergency room more reliable than one taken by an ambulance attendant five or ten minutes previously? Which score will be accepted in the event of inter-rater variability?

The "what" refers to the condition that the reading is supposed to assess. The *Schedule* indicates that the score of nine or under must be due to a "brain impairment" in order to designate an insured as "catastrophically impaired". However, it is well recognized that conditions other than brain impairment can affect the Glasgow Coma Scale reading obtained at the scene of an accident. As the reading incorporates verbal, motor and eye responses, factors such as intoxication, inability to speak English, intubation, sedation, disability (for example pre-existing hearing impairment or neurological compromise) or other medical conditions (for example, diabetes) could compromise a Glasgow Coma scale in the absence of brain impairment, or confound a reading in the presence of a concurrent head injury.

The "when" refers to the requirement that a reading must be "administered within a reasonable period of time after the accident", in order to be valid for the purpose of the *Schedule*. A severely depressed Glasgow Coma Scale reading may be obtained minutes after an accident, reflecting a transient loss of consciousness followed by full recovery. On the other hand, an initially high reading may be followed by a low reading hours later, reflecting severe brain trauma and prognosticative of a poor outcome. The question thus arises as to when "a reasonable period of time" has elapsed after any given accident, in order for a Glasgow Coma Scale reading to be valid for the purposes of the *Schedule*.

Based upon a straightforward reading of section 2(1.1/1.2)(e)(i) of the *Schedule*, catastrophic designation should be available on an immediate basis to insureds who can demonstrate from their medical records that a Glasgow Coma Scale reading of nine or less was recorded following the accident. However, in light of the considerations set out

above, there has been some controversy between DAC assessors as to how the "who, what and when" questions should be answered in respect of individual cases. This in turn has led to three reported decisions from three separate tribunals addressing this test, which collectively (along with cases addressing other components of the "catastrophic" threshold) suggest that an individualized, ends-based analysis will apply in cases where there is disagreement as to whether the provisions of the section have been met.

The first is the case of ***Unifund v Fletcher***, a private arbitration ruling by Mr. Bruce Robinson, pursuant to the *Arbitration Act*, S.O. 1991, C-17.

In that case, the insured was a 14-year-old boy who was struck by a vehicle while operating his bicycle. The time of the accident was 6:43 p.m., with the first Glasgow Coma Scale having been recorded at 6:57 p.m. as 6 out of 15. By 7:02 p.m. the scale had reading had risen to 8 out of 15 and by 7:03 p.m., his Glasgow Coma Scale was 11. The Glasgow Coma Scale readings never dropped below 10 subsequently, but did not rise as high as 13 until 11:30 p.m. on the night of the accident.

In that case, a CAT DAC conducted by Kaplan & Kaplan accepted that there was a catastrophic impairment based upon the initial depressed Glasgow Coma Scale readings at the scene of the accident. Mr. Robinson, having heard evidence from Dr. Bruce Stewart regarding the clinical use of the Glasgow Coma Scale reading as well as its prognosticative value, found that the approach of Kaplan & Kaplan had been overly simplistic. He concluded, in deciding that Michael ***Fletcher*** had not sustained a catastrophic impairment as follows:

> To properly determine those people who appropriately fall into the category of catastrophic injury, it is necessary that the critical period of time is not immediately after the accident but in the period which best relates to any loss of consciousness or lowered level of brain function to future [outcome] from a neurological or cognitive perspective. I therefore find that "a reasonable period of time" in this case was in a half hour of the accident. This accomplishes the intent of the legislation and within a fairly short period of time still allows for an assessment of whether access to increase benefits is necessary for those people that suffer catastrophic injury. During the acute phase, the injured person will be receiving the appropriate care in any event and would not, by such a brief intervening period, be in any way prejudiced.

In reaching this conclusion, Arbitrator Robinson stated that it was "clear" that the determination of "catastrophic impairment" with regard to "brain impairment" was intended to be based on a measure which would assist in predicting the outcome of brain injury.

It follows from this decision that what is a "reasonable period of time after the accident" will depend upon expert medical evidence surrounding the use and relevance of Glasgow Coma Scale readings in any given cases.

The second decided case on this issue was ***Young v Liberty Mutual***, a decision by Arbitrator Beth Allen of the Financial Services Commission of Ontario. Dr. Bruce Stewart was again called upon on behalf of the insurer. The facts in this case were slightly different from ***Fletcher***, although in some significant ways, the analysis was similar.

In that case, the insurer argued, pursuant to the CAT DAC prepared by MDAC, that the initial Glasgow Coma Scale readings were not valid due to confounding factors of intubation, sedation and post-accident seizures. In this regard, Arbitrator Allen found that the legislators were presumed to appreciate that in situations of trauma, Glasgow Coma Scale readings would often be influenced by these factors, and therefore the presence of these factors did not invalidate the Glasgow Coma Scale readings. At the same time, she rejected the insurer's argument based upon Dr. Stewart s testimony that a six hour period is a "reasonable time after the accident" to consider a Glasgow Coma Scale reading. She accepted that in this case, a period of one hour was a "reasonable time after the accident" for the applicant to have maintained a Glasgow Coma Scale reading of 9 or less, which score was not invalidated by the presence of intubation, medication or post-accident seizures.

The Arbitration decision in ***Young*** was the subject of a recent Appeal decision written by Director's Delegate David Evans. The first level ruling was upheld on the evidence that was before the Arbitrator. The Director's Delegate focused upon the wording of section 2(1)(e)(i) of the *Schedule*, rejecting the modifiers to the words of the Regulation that had been incorporated into the analysis undertaken by the CAT DAC. For example, the DAC assessors had sought to determine whether the depressed Glasgow Coma Scale readings were "valid and reliable" and the "direct and exclusive" result of brain impairment. The Director's Delegate found that, in adding these modifiers to the test set out in the *Schedule*, the assessors were taking too demanding an approach. He additionally rejected Arbitrator Robinson s approach in ***Unifund v Fletcher*** in stating, "In my opinion, that predictive analysis is not called for in the definition."

Instead, the Director's Delegate concentrated his analysis on the essential requirement that the reduced Glasgow Coma Scale readings must result from "brain impairment" in determining whether a Glasgow Coma Scale reading will be sufficient to qualify an insured for catastrophic designation. In reviewing his approach to the evidence that had been before the Arbitrator in ***Young***, it would still appear that not every case in which a Glasgow Coma Scale reading of 9 or less will result in a catastrophic designation. While arguments surrounding the prognosticative value of the Glasgow Coma Scale may not carry much weight (at least before the Financial Services Commission of Ontario), other factors suggesting that a low reading is not the result of a brain impairment are still germane to a determination under section 2(1.1/1.2)(e)(i) of the *Schedule.*

The case of ***Holland v Pilot Insurance Co.*** decided on a motion before Mr. Justice Keenan was the first ruling of the Superior Court addressing the test set out at sections

2(1.1/1.2)(e)(i) of the *Schedule*. The ruling suggests that a liberal interpretation to the issue of catastrophic designation will be adopted by the Courts.

In the ***Holland*** case, the potentially confounding influences of alcohol and marijuana on an initial Glasgow Coma Scale readings were under consideration. Based upon written reports set out by way of affidavit evidence, Justice Keenan concluded on the evidence that the Glasgow Coma Scale readings of 9 or less had not been influenced by alcohol consumption. However, he did distinguish this from the cases of ***Fletcher*** and ***Young*** (supra.), in that the question of what constituted a "reasonable period of time" after the accident was not before the Court.

Of broader significance, however, were the comments adopted in *obiter*:

> This type of regulation is adopted by the legislature after extensive consultation with interested parties, including insurers. If restrictive meaning is to be assigned to the regulation, it should be clearly recited in the regulation itself.

These comments are consistent with those contained in another recent decisions of the Superior Court, addressing other components of the definition of "catastrophic impairment" contained in the *Schedule*.

In the case of ***Desbiens v Mordini***, the central issue dealt with the consideration of pre-accident paraplegia in determining whether the 55% whole person impairment catastrophic definition had been reached. In his reasons for judgment, Mr. Justice Harvey Spiegel stated that a "broad and liberal" interpretation of the catastrophic criteria should be adopted by the courts, rendering the coverage more inclusive than perhaps had previously been understood by experts in the field.

In discussing the legislative history of the Bill 59 enactments, he commented:

> I cannot resist observing the irony that a government that was concerned about the unfairness of an innocent victim having to overcome an "artificial threshold" to recover full loss of income had no such concerns in imposing a catastrophic impairment threshold as a condition on an innocent victim s right to recover health care expenses. To be charitable, I will assume that the government intended that the catastrophic impairment threshold would be interpreted in a manner that would not deprive an innocent victim of much needed health care expenses.

Almost as an afterthought, he also acknowledged that:

> Another important purpose was to control premiums. In my view, however, insofar as health care expenses are concerned, this was to be achieved by the drastic reduction in the level of medical and rehabilitation benefits available on a no fault basis

However:

> While Bill 59 allows only those who have suffered catastrophic impairment to recovery health care expenses in my view, the text of the Regulation itself indicates that the drafters clearly intended the definition of "catastrophic impairment" to be inclusive rather than restrictive.

The direction (or lack of direction) emerging on the interpretation of sections 2(1.1/1.2)(e)(i) of the *Schedule* causes problems for both insurers and accident victims alike. Clearly, the inclusion of a Glasgow Coma Scale score of nine or under as a criterion for catastrophic impairment was intended to provide an early, largely objective way of determining whether enhanced "catastrophic" levels of benefits would be available, and to assist in rehabilitation planning and provision in the crucial early months following a traumatic brain injury.

Unfortunately, the significance of clinical judgment in determining whether a score of nine or less has been obtained "according to a test administered within a reasonable period of time after the accident by a person trained for that purpose" does not appear to have been considered in the drafting of the legislation. The authority on the subject to date suggests that there is a place for expert clinical judgment in interpreting the relevance of a Glasgow Coma Scale of nine or less, although that judgment needs to be circumscribed to the issue of whether the reading is the result of a brain impairment. In general, the following guidance can be gleaned from the cases to date:

- A liberal interpretation of the *Schedule* will be adopted by the ultimate decision maker, in the insured person s favour;

- The decision maker will be reluctant to "read in" qualifiers to the language of section 2(1.1/1.2)(e)(i);

- The inquiry needs to focus upon the question of whether a Glasgow Coma Scale reading of 9 or under was **the result of a brain impairment**. The following considerations will be relevant to that inquiry:

  i) When was the reading obtained?

  ii) Was the score of 9 or under due to a cause other than brain impairment?

  iii) Is the outcome consistent with the occurrence of a traumatic brain injury?

  At this point, the semantics of the inquiry become relevant. While these factors will be relevant in determining the causal relationship between the Glasgow Coma Scale of 9 or under and brain impairment, they will not be given any weight where a party seeks to question the "validity" of the Glasgow Coma Scale *per se*.

To date, CAT DAC determinations have yielded inconsistent determinations on similar facts within and between assessment centres, as medical experts have attempted to incorporate emerging legal authority into their decision making. Consequently, significant assessment costs continue to be incurred to challenge CAT applications and to obtain second opinions following CAT DAC assessments. Formal legal disputes following CAT DAC assessments are also common, given the enormous sums of money potentially at stake.

For insurers, the uncertainty surrounding these determinations is particularly problematic given the recent ruling in ***Liberty Mutual v Fernandes***, in which the Superior Court held that an insurer has no mechanism in law to challenge a CAT DAC ruling with which it disagrees. Thus, while an insured person would appear to have an unfettered right to obtain and present evidence to challenge an unfavourable CAT determination in court or at an arbitration proceeding before the Financial Services Commission, an insurer is indefinitely bound by the determination of a CAT DAC, without recourse to seek further adjudication. This issue is currently under appeal to the Court of Appeal. Unless and until this ruling is reversed, the CAT DAC would appear to be the final adjudicator of this issue as far as the insurer is concerned, at least pending the eradication of the DAC process altogether, now *schedule*d for February, 2006.

For the insured person, an early, certain determination of catastrophic impairment following a brain injury will only occur in the clearest of cases. Where there are subjective issues surrounding the "who, what and when" of the Glasgow Coma Scale scores recorded, a lengthy and expensive medical and legal process may still follow. Where a case does ultimately proceed before a trier of fact, it follows that a significant period of time will have elapsed from the date of the accident, and they will therefore have the benefit of hindsight to determine whether a particular Glasgow Coma Scale reading did or did not result from a brain impairment in light of the course of the insured s subsequent recovery. The cases that have been decided to date suggest that judicial decision makers will be disinclined to grapple with questions regarding the prognosticative value of Glasgow Coma Scale readings in theory, but will nonetheless consider whether (with the benefit of hindsight) a particular reading of nine or less did or did not predict the long term consequences of head injury in the particular case at hand.

Indeed, following the approach in ***Desbiens***, it would seem that the most influential evidence in a catastrophic determination case may relate to the insured person s need (or lack of need) for benefits funded at the catastrophic level. To the extent that there is room for subjective judgement in interpreting the various definitions of catastrophic impairment (as there is with most of the listed criteria), we can expect to see the definitions read expansively rather than restrictively, in accordance with the "broad and liberal" approach adopted in the decided cases to date. Thereafter, the reasonable debate will turn to the question of entitlement in individual cases, noting that eligibility to enhanced levels of coverage does not itself establish entitlement to the enhanced benefits.

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Subsequent cases have confirmed that the trend in CAT adjudication (regardless of the basis for inclusion in the definition) have tended towards an increasingly "fair, large and liberal" interpretation of the CAT threshold.

There can also be little doubt that an "ends-focussed" analysis has been applied in several cases. If the insured person has needs which exceed non-catastrophic coverage, then a finding of catastrophic determination will likely follow.

The trend towards inclusion has also been demonstrated in the following approaches:

1. Mental and behavioural impairments are added to physical impairments for the purpose of the WPI analysis, pursuant to ***Desbiens*** (see ***Ms. G. and Pilot***);

2. Pre-accident impairments are not "deducted" from the WPI (as would appear to be mandated by a reading of the *Guides*). Rather, adjudicators have held that there is no room for the "thin-skulled" argument in accident benefits cases. If the accident materially or significantly contributes to a catastrophic presentation, then CAT status will follow. (See ***Monks v ING***; ***McMichael and Belair*** (affirmed on appeal); ***Lee and State Farm***; ***Desbiens v Mordini***). It therefore stands to reason that an insured could sustain catastrophic impairments from multiple successive accidents, even if the incremental impact on function is modest (but material);

3. Adherence to the *Guides* is abandoned when such adherence would not bring about the desired result (***Belair v McMichael***; ***Ms. G. v Pilot***)

   > *The Guides note that they do not cover all conditions arising out of injuries. They further state that while medical information is essential for the decision making process, the key is the interpretation and use of the medical information. The critical problem, state the Guides, is that there is no formula known by which to combine knowledge about a medical condition with non-medical information about one s personal, social, occupational and other activities of daily life. The Guides specifically state that while they can help in areas such as workers' compensation, they "cannot provide complete and definitive answers".*
   >
   > - Arbitrator Blackman, ***Ms. G. and Pilot***

4. It may be enough to have a Class 4 or 5 impairment in only one realm (such as employment activity), to be deemed catastrophic pursuant to the definition at 2(g) (***Desbiens v Mordini*** and ***Belair v McMichael***): and

5. The determination of WPI is not felt to be a medical analysis. Indeed, in ***Ms. G. v Pilot***, Arbitrator Blackman undertook an analysis of impairments that had not been commented upon by any of the assessors. When he felt that none of the assessors had gone far enough in designating ratings to specific impairments, he did so himself, even though there was no opinion evidence before him to support the direction he took.

> *Hence, the approach of the Schedule is that ultimately this is an adjudicative, not a medical determination. The trier of fact is not simply reduced to choosing between expert medical opinions. The trier of fact, rather, has the responsibility under paragraph 2(1)(f) of the Schedule to endeavour, in accordance with the rules of statutory interpretation, to capture and accurately estimate all of the impairments that an insured person has sustained as a result of the accident.*
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> ...
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> *The search for the truth is crucially important. Finality and cost-effectiveness is also important. Having a chance to review the medical documentation and to examine Ms. G, and having failed to properly assess all of her impairments, the present applicable remedy in this particular case is not a "do over" by the CAT DAC, which may then require assessments by other practitioners, followed by recalling witnesses or calling new experts. Rather, in my view, the proper course is for an adjudicative assessment to be made as best as one can on the basis of the available evidence.*
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> - Arbitrator Blackman ***Ms. G. and Pilot***

Increasingly, it would appear that insurers are ill-advised to challenge CAT designations except in the case of major credibility issues (on the part of the insured or the author of the CAT application).

However, that does not mean that all claims for catastrophic coverages are automatically payable if a designation has been accepted. By way of example, while Mr. ***Desbiens*** was found to be catastrophically injured as a result of his motor vehicle accident, he was only able to recover those expenses for goods and services that he would not have required but for the marginal deterioration in his condition due to the accident.

Secondly, if a CAT case is going to be challenged, it is essential that the reviews be exhaustive and include reports from all relevant experts. Unless the insurer is content to have an arbitrator assume the role of assessing mental health practitioner (as in ***Ms. G.***), it

is important to have reports speaking to the potential WPI allocation arising from each and every possible impairment.

Brief summary of cases I've looked at:

1. ***Monks v ING*** – Superior Court June 15, 2005

   The claimant was injured in three separate accidents. She then had surgery following the third accident, and had a very poor outcome from that surgery. The litigation pertained to the third accident only. The insurer argued that the impairment arose as a result of the first accident. It was conceded that the outcome was catastrophic, but ING refused to accept a CAT claim in respect of the third MVA. The Court held that full CAT benefits were available in respect of the third claim, and that there was "no room" for a thin skulled argument in accident benefits cases.

2. ***McMichael v Belair*** – FSCO March 2, 2005; Appeal March 14, 2006 (affirmed)

   The claimant suffered significant injuries, including a skull fracture. In addition, he was unable to reintegrate into the workforce. He became entirely dysfunctional due to his crack addiction, which he attributed to post accident factors including depression. It was accepted that his psychosocial problems were materially related to the accident (even though he had a prior history of cocaine use), and concluded that Mr. McMichael had a class 4 impairment in three of four spheres. On appeal, Director's Delegate Makepeace noted that, in ***Desbiens***, the parties had agreed that CAT status would follow a finding of a class 4 impairment in any one of four spheres, although this issue was not strictly before her.

3. ***Ms. G. v Pilot***

   The claimant suffered a significant lower extremity injury as well as various other more minor injuries throughout her body. She suffered a psychological injury. A chiropractor initially authored an application based upon a WPI of 62% based primarily on neck and back impairments. Dr. Ameis testified for Pilot. Dr. Becker apparently prepared a reply report for Ms. G. In his analysis, Arbitrator Blackman embarked upon his own evaluation, adding a psychological rating (which he developed following his own analysis) to physical ratings (which included numerous ratings which had not been set out in any report that was before him) to arrive at a 55% WPI. He rejected the notion that the application of the *Guides* is an exercise that calls for medical expertise, but did concede that medical information regarding the claimant's status was necessary to the exercise. He further took a transparently ends-focussed approach to his analysis.

4. ***Lee v State Farm*** – FSCO Denise Ashby

   Ms. Lee suffered a possible mild TBI and a myriad of psychological symptoms post accident. It was conceded by all experts that she was markedly impaired. However, State Farm disputed CAT designation based upon Dr. Hershberg s report. Dr. Hershberg felt that the claimant had a prior "dependent personality" and a history of prescription drug abuse. He noted a questionable temporal link between the accident and the onset of the more severe dysfunction and thus questioned causation. Dr. Hershberg s testimony was soundly rejected by the Arbitrator. It was felt that his views were based upon hypothesis and an unrecognized prior condition ("dependent personality"). It was emphasized that causation is established where there is a material contribution to the claimant's condition. A casual link between the claimant's loss of job status/identity and the ensuing psychological decompensation was accepted.

5. ***Villers v Pilot***

   The claimant suffered a degenerative condition. He alleged that he had become worse as a result of the accident. His CAT claim was rejected (upheld on appeal). It was found that he had not been forthright regarding his pre-accident level of functioning. While the DAC report (and process) was flawed, it was still open to the Arbitrator to conclude that the claimant was not catastrophically injured due to the accident.