Court of Queen's Bench of Alberta

Citation: Reid v. Maloney, 2010 ABQB 794

Date: 20101214
Docket: 0203 02967
Registry: Edmonton

Between:

Marlene Reid

Plaintiff

- and -

Kevin Maloney

Defendant

Reasons for Judgment
of the
Honourable Madam Justice D.C. Read

Summary:

A woman with a history of back problems injured her back playing with her grandchild. Because the back pain failed to settle after several weeks, she visited a chiropractor who manipulated her back. After her second visit, her pain intensified and moved to involve the other side of her body and she experienced sensory changes. Ultimately, she was diagnosed with an acute disc protrusion which had to be surgically repaired. She sued the chiropractor claiming failure to properly diagnose her, failure to obtain her consent and failure properly to treat her. At issue was whether the chiropractor had properly diagnosed her, properly obtained her consent, and properly treated her.

Background Facts:

[1] On about February 15, 2000, 48 year old Marlene Reid was playing with her then less than two year old grandson, who weighed 23 pounds. After he jumped into her arms from one of the steps on a stairway, Mrs. Reid turned and felt a pain in her left buttock or hip. Mrs. Reid had suffered from similar pains in the past and had dealt with them by obtaining treatment from her physiotherapist who treated pain with heat and what Mrs. Reid called "pushing in the buttock area to loosen" it. Mrs. Reid was not certain of the date of the incident with her grandson but both counsel agreed that it likely occurred about February 15, 2000.

[2] Mrs. Reid was no stranger to back problems and had a long history of them stretching back into the 1980s. By 2000, she had undergone two previous lower back surgeries, one of which occurred when she was only 27 years old. The evidence provided respecting her previous surgeries was sparse but it appears she underwent surgery in both 1984 and in 1988. Dr. Narang operated on her for a herniated L4-L5 disc in 1984. Dr. Glasgow operated in 1988 to relieve spinal stenosis due to a sequestrated intervertebral disc at L5-S1 on the left. As already indicated, she also had a history of episodic lower back pain since the earlier surgeries.

[3] After the incident with her grandson, Mrs. Reid, who worked full time as an insurance agent, was unable to see her regular physiotherapist because things were busy at her office. She found it impossible to make an appointment with the physiotherapist at a convenient time and so went to massage therapy instead. The massage therapy records indicate that Mrs. Reid's first treatment occurred on February 18, 2000. Mrs. Reid felt that massage alleviated the pain somewhat but it was still there.

[4] Although she continued to have pain, Mrs. Reid's evidence was that she continued to function. She continued to work full time in the insurance agency, wore her regular high heeled shoes, and continued to participate in all of her other regular daily activities. She did not recall that the pain got any worse during the period between about February 15, 2000, when she caught her grandson and March 9, 2000, when she first saw the defendant chiropractor, Dr. Kevin Maloney or that it moved around at all. Nor did she recall any other event during this period that could have exacerbated her back problem.

[5] However, because her symptoms persisted, Mrs. Reid took the advice of a friend at work who suggested that she see a chiropractor and who suggested, particularly, Dr. Maloney, whom the friend said was the son of her own chiropractor. Dr. Maloney practiced in St. Albert where Mrs. Reid lived and worked.

[6] Mrs. Reid decided to take this advice even though she had never before sought treatment from a chiropractor. She obtained an appointment and saw Dr. Maloney for the first time on Thursday, March 9, 2000. She saw him again the next day and on a third occasion on the following Monday, March 13, 2000.

[7] Dr. Maloney is a 1997 graduate of the Palmer School of Chiropractic in San Jose, California, a school often referred to as Palmer West during the trial. He wrote and passed the Canadian Board of Chiropractors examinations and the Alberta provincial clinical examinations in 1997 and has been a licensed chiropractor since November 13, 1997. After graduating, Dr. Maloney set up practice as a sole practitioner in St. Albert, and had been in practice for over two years when he first saw Mrs. Reid as a patient. He estimated that about 35% of his patients suffered from symptoms of low back pain.

[8] Dr. Maloney treated Mrs. Reid on all three of her visits to him. On at least the first two visits, Dr. Maloney employed spinal manipulative therapy ("SMT") in his treatment of Mrs.

Reid. Mrs. Reid thought her back felt better after the first visit but after the second, she felt much worse. Her pain had both intensified and moved from being mainly left sided to involving her right side as well. In addition, she experienced sensory changes in her leg and felt that she could not walk properly. Although she had made an appointment for later on Monday, March 13, her symptoms were so intense during the weekend of March 11-12 that she went back to see Dr. Maloney first thing Monday morning. On this visit, she was accompanied by her husband Dan Reid. By the end of the third visit, Mrs. Reid felt even worse. She was not treated again by Dr. Maloney.

[9] Dr. Maloney was concerned about Mrs. Reid's condition when he saw her on the morning of March 13 and, after treating her, advised her to go to the emergency department of the local hospital. However, Mrs. Reid was worried she would have to wait a long time if she went to the hospital and elected, instead, to go directly to the office of her family physician, Dr. Gray. Dr. Maloney wrote a letter to Dr. Gray, providing some information to him about Mrs. Reid's then condition, the history, and what his concerns were, and Mrs. Reid took this letter when she went to Dr. Gray's office directly from Dr. Maloney's. Her husband accompanied her and did the driving.

[10] Dr. Gray's chart indicates that Mrs. Reid was in great pain and very fearful when she came to his office on March 13. He prescribed analgesics and he, too, suggested she go to the hospital emergency department. The next day she did. For the next two months, she remained very symptomatic and was able to do very little. Her memory about this time period is compromised because she was taking strong opiate based analgesics. It is clear from the medical evidence, however, that she sought and obtained medical help from various other medical practitioners.

[11] Mrs. Reid's husband, Dan Reid sought an explanation from Dr. Maloney respecting what had happened. Dr. Maloney wrote a letter to Mr. and Mrs. Reid, dated March 24, 2000, in response to this request. This letter was made an exhibit at trial.

[12] Eventually, after obtaining an MRI, she was diagnosed with an acute L4-5 disc protrusion and had surgery on April 10, 2000. The extrusion was described as large in the operative notes. She had further surgery on the same area of her back on September 28, 2000 when two disc fragments were removed as well as scar tissue. After her surgeries, Mrs. Reid had a long recovery period but she is now substantially better.

[13] Mrs. Reid sued Dr. Maloney claiming that his treatment had caused or contributed to her back injury and alleging that he had failed to properly diagnose her, failed to obtain her consent to treatment and failed properly to treat her. Dr. Maloney denied that his treatment of Mrs. Reid had caused or contributed to her injuries and said that he had met the standard of care required for chiropractors in his diagnosis and treatment of Mrs. Reid and in obtaining her consent to this treatment.

Issues:

[14] There are five issues for resolution in this decision:

1. Does Dr. Maloney owe Mrs. Reid a duty of care?

2. What is the standard of care of a chiropractor?

3. Did Dr. Maloney meet the standard of care by obtaining Mrs. Reid's informed consent before treating her?

4. Did Dr. Maloney otherwise meet the standard of care?

5. Was Dr. Maloney's treatment of Mrs. Reid the actual and legal cause of her injuries?

[15] The onus is on Mrs. Reid to prove all elements of each issue on a balance of probabilities: Picard & Robertson, *Legal Liability of Doctors and Hospitals in Canada,* 4th ed. (Toronto: Thomson, 2007) at 212 ("Picard & Robertson"); ***Waap v. Alberta,*** 2008 ABQB 544, at paras. 29-30.

[16] Standard of care issues must be addressed before dealing with causation: ***McArdle Estate v. Cox***, 2003 ABCA 106, at para. 25.

Discussion:

1. Duty of Care Owed by a Chiropractor to his Patient:

[17] The first question to be considered in any action for negligence is whether the defendant owed a duty of care to the plaintiff. However, in the case of the relationship between a health care professional and a patient, innumerable courts have already recognized that this relationship gives rise to a duty of care. Consequently, precedent has already established that Dr. Maloney owed a duty of care to Mrs. Reid as his patient and it is unnecessary to undertake a full fledged duty of care analysis: ***Mustapha v. Culligan of Canada Ltd***., 2008 SCC 27. Dr. Maloney owed a duty of care to Mrs. Reid as his patient.

2. The Standard of Care of a Chiropractor:

[18] Courts have held that chiropractors are to be treated like other medical practitioners and the principles that relate to medical professionals other than chiropractors apply to chiropractors as well. A recent decision of this Court clearly articulated the standard of care with particular reference to chiropractors. In ***Olsen v. Campbell Jones,*** 2009 ABQB 371, para. 10, Crighton, J.

described the standard of care that a chiropractor must meet as, "the degree of care, diligence, judgment and skill which is exercised by a normal, prudent or reasonable chiropractor under like or similar circumstances and with the same experience and training". This definition was quoted with approval by Yamauchi, J. in ***Dickson v. Pinder,*** 2010 ABQB 269. It provides a clear and concise definition of what standard Dr. Maloney had to meet in his treatment of Mrs. Reid.

[19] Mrs. Reid alleges that Dr. Maloney failed to meet the standard of care in two major areas:

> failure to properly inform Mrs. Reid of what treatment he planned to give her and to disclose to her the inherent risks of treatment or obtain Mrs. Reid's consent to treatment, and
>
> failure to take an adequate history and to do adequate testing. He therefore did not properly diagnose her condition before commencing treatment.

[20] I will examine each of these in the order that I have set them out above. In both, Mrs. Reid bears the burden of proving, on a balance of probabilities, that Dr. Maloney breached the requisite standard of care.

3. Did Dr. Maloney obtain Mrs. Reid's Informed Consent to Treatment?

Evidence respecting informed consent:

[21] On behalf of Mrs. Reid, it was argued that Dr. Maloney failed in his duty to obtain Mrs. Reid's informed consent in three main areas. He failed to advise her sufficiently of the treatment he proposed for what he had diagnosed; he failed to advise her of the risks of this treatment; and he failed to advise her of possible alternative treatments.

[22] Both parties agreed that when Mrs. Reid first saw Dr. Maloney, she had low back pain and pain radiating into her left leg.

Evidence of Mrs. Reid:

[23] Mrs. Reid's evidence was that before she saw Dr. Maloney for the first time on March 9, 2000, his receptionist, Renée Cottingham handed her a document called Informed Consent to Chiropractic Adjustments and Care (the "Consent Form") together with a one page form requesting certain information respecting her medical history ("patient history check list"). This occurred while Mrs. Reid was still in the reception area. The Consent Form read as follows:

> I hereby request and consent to the performance of chiropractic adjustments and other chiropractic procedures, including various modes of physical therapy and, if

> necessary, diagnostic x-rays, on me by the doctor of chiropractic named below and/or anyone working in this clinic authorized by the doctor of chiropractic named below.
>
> I have had an opportunity to discuss with the doctor of chiropractic named below and/or with other office or clinic personnel, the nature and purpose of chiropractic adjustments and other procedures. I understand that results are not guaranteed.
>
> I further understand and am informed that, as in all health care, in the practice of chiropractic there are some very slight risks to treatment, including, but not limited to, muscle strains and sprains, disc injuries, and strokes. I do not expect the doctor to be able to anticipate and explain all risks and complications and I wish to rely on the doctor to exercise judgment during the course of the procedure which the doctor feels at the time, based upon the facts then known, is in my best interests.
>
> I have read the above consent. I have also had an opportunity to ask questions about its content, and by signing below I agree to the above mentioned chiropractic procedures. I intend this consent form to cover the entire course of treatment for my present condition.

[24] Mrs. Reid did not recall discussing either the Consent Form or the patient history checklist with Mrs. Cottingham and simply signed the Consent Form in the reception area. Mrs. Reid also said she also asked no questions about this form when she later saw Dr. Maloney and no explanation was offered by Dr. Maloney.

[25] Mrs. Reid did agree that, following his examination of her, Dr. Maloney told her he diagnosed her as suffering from a "sprained/strain" back injury. She says she assumed, but was not told, that this injury was in the same general area of her back that had been causing her pain. She said, as well, that Dr. Maloney told her this was caused by a muscle pinching a nerve. She does not recall his saying anything about the possibility of a disc problem or a spinal problem or any discussion about alternative possible problems. She also does not recall that Dr. Maloney discussed with her the option of simply doing nothing or any alternatives other than chiropractic manipulation.

[26] Mrs. Reid recalled that Dr. Maloney also told her that the muscles in her lower back were extremely tired and he was going to pump her hips to loosen them. Mrs. Reid said, too, that Dr. Maloney asked about x-rays that had been taken at the Grandin Medical Clinic on March 7, 2000 but knew she did not have the results as yet. He told her that he was going to do the pumping to loosen the lower back and lessen her discomfort while waiting for the x-rays. She did not recall that he said anything about putting pressure on her spine. She said that if he had mentioned putting pressure on her spine, she would have questioned that. She would have asked him, "I've had two surgeries is this a good thing to do?". In cross examination, however, she agreed when it

was put to her that Dr. Maloney had told her what adjustments he intended to do in order to try to correct the problem he had diagnosed and the purpose of these adjustments.

[27] On March 10, according to Mrs. Reid, Dr. Maloney was running late. He was about 20 minutes late for her appointment and told her when he saw her that he was already late for a hockey game, explaining he was the chiropractor for the local hockey team. To Mrs. Reid, Dr. Maloney seemed like a busy man. She did not discuss with him any new symptoms she was having and Dr. Maloney did not suggest he was going to try any other treatment. She says he told her that she had a bit of arthritis but that this was not uncommon for people of her age. She said then he told her he was going to do the same thing he had the previous day but after beginning the treatment he told her that he would use more force than he had the previous day. She agreed that she told him that this would not be a problem.

[28] She said that when Dr. Maloney did the more forceful push, there was an instant burning pain in her back and she felt like the air was pushed out of her lungs. She said she gasped and her head 'snapped' back to look at him. She said she asked what happened and Dr. Maloney told her that he had cracked her lower back. She said that Dr. Maloney then told her that the back had to reposition itself and she would feel some discomfort. Her evidence was that there had been no discussion prior to this about repositioning her back. She said that Dr. Maloney gave her his business card and wrote his home telephone on the back of it. He told her to continue to ice her back and to call him if necessary. She said he then left while she was still on the chiropractic table.

[29] She said she felt different than she had before the treatment. Her back, hips and legs felt weak and her legs and right hip hurt. The burning sensation remained in her back. She said she got off the table herself, got dressed and 'waddled' out to her car because of the pain and weakness she felt.

[30] On her third visit, Mrs. Reid did not recall that Dr. Maloney did any further tests or provided any further information to her before telling her that he was going to reposition her back. She did not recall that he said anything about her spine or that he said anything else about the treatment he was going to do. There was no suggestion of alternative treatments or of the risks of treatment. She said if he had given her any indication that anything further would happen or she could have further pain as a result, she would not have agreed to further treatment. She said that he treated her with wedge shaped blocks under her hips and pushed on her hips and recalled that the examination table she was lying on dropped suddenly when he pushed. She also recalled being briefly treated with a machine called the spinolator. After these treatments, Mrs. Reid said her pain was greatly increased. She described it as measuring 5 on a 10 point scale when she arrived and as being 10 out of 10 after the treatment.

[31] Her husband Dan Reid, who was with her at the third visit, also did not recall that Dr. Maloney explained what he was going to do before doing it. Notwithstanding extensive cross examination, Mr. Reid would not agree that Dr. Maloney examined Mrs. Reid or did any testing

of Mrs. Reid before beginning the treatment. Mr. Reid did recall Dr. Maloney telling him that he thought Mrs. Reid was going to be fine.

Evidence of Dr. Maloney:

[32] Dr. Maloney testified firstly about the professional standards he was governed by. He said that the College of Chiropractors of Alberta (now called the Alberta College and Association of Chiropractors) (the "ACAC") is the licensing body for chiropractors in Alberta. He said that ACAC periodically issues a publication called the *Cornerstone* and the spring of 1999 edition set out the ACAC's recommended policy for obtaining written consent from patients. This policy included a recommended form of consent.

[33] The publication was made an exhibit. The applicable portion is as follows:

> On March 19, 1999 the following policy ("ACAC Consent Policy") was adopted by Council and will be applicable to all members of the College of Chiropractors of Alberta effective immediately.
>
> | | |
> |---|---|
> | **Description of The Policy** | Written, informed consent must be obtained from all patients. |
> | **Premises of the Policy** | As a matter of ethics and law, in order to obtain valid informed consent there is an obligation, prior to examination and treatment, to disclose any potential risk to the patient.
The legal duty has been established by case law and, in some provinces by legislation.
...
Alberta's chiropractors are currently utilizing written informed consent on a voluntary basis. |
> | **Policy** | 1. Members will obtain from every patient..written Informed Consent before commencing any examination, diagnostic procedure or treatment.

2. The Informed Consent must disclose, to the patient .., the nature of the proposed treatment or procedure and any potential risks including those that may be of a special or unusual nature.

3. Chiropractors must provide patients the opportunity to ask questions concerning the risks involved and should answer those questions to the patient's satisfaction. |

4. In view that the best record of consent is one that is objectively documented, Informed Consent must be given in writing. [emphasis in the original] Once written Informed Consent has been obtained, permission for future treatments is also granted. However there is a continuing obligation to keep patients informed and to advise them of any new or changed material risk.

Legislative Context

Code of Conduct

19(1) The Code of Ethics of the Canadian Chiropractic Association, as amended from time to time, is applicable to chiropractors in Alberta.

Canadian Chiropractic Association Code of Ethics

31 The chiropractor will respect this Code of Ethics, the Clinical Guidelines for the Practice of Chiropractors in Canada...

Clinical Guidelines for Chiropractic Practice in Canada

1.1 Chiropractors must disclose to the patient..,the nature of the proposed treatment or procedure and any material risks including those that may be of a special or unusual nature.

1.5 Consent may be given orally or in writing.

Summary and Conclusion

The policy.. [is]..based on increased recognition by society, and in the law, that patients have the right to know about risks and their health care options before consenting to examination or treatment.
At Council's request;[sic] attached is a sample of an informed consent release...
The development and implementation of this policy is offered in the spirit of assisting members in meeting reasonable expectations of informed decision making on the part of the public.

[34] The Consent Form completed by Mrs. Reid is identical to the form recommended for use by the ACAC and attached to the ACAC Consent Policy and was the standard consent form used in his office when Mrs. Reid was Dr. Maloney's patient.

[35] Dr. Maloney said that he considered it a requirement of the ACAC that a written consent be obtained from the patient and that, while he instructed Mrs. Cottingham not to insist that a reluctant patient sign the written consent before he had seen the patient, if after discussion with him about any concerns, a patient still refused to sign the consent, he would discharge the patient without treatment.

[36] Dr. Maloney had no independent memory of Mrs. Reid's first appointment with him on March 9, 2000 nor of her second appointment on March 10. He gave extensive testimony however, about what his standard practice was in dealing with a new patient. In giving his evidence of standard practice, Dr. Maloney was asked to assume that a patient had attended with complaints of low back and left leg pain, such as Mrs. Reid was suffering from when he first saw her. Dr. Maloney was not asked if his standard practice for new patients suffering from these symptoms was different from his standard practice generally and, if so, in what fashion.

[37] According to Dr. Maloney, his standard practice in 2000 was to ask Mrs. Cottingham, his receptionist, to give each new patient the Consent Form together with the patient history checklist; he instructed her to ask the new patient to complete these documents while the patient was still in the waiting area and before seeing Dr. Maloney. His standing instructions for Mrs. Cottingham were to provide the form of consent to the new patient and ask them to read it through and sign it if they were comfortable doing so. If they were not, she was to tell them they could wait and speak to Dr. Maloney before they signed it. If they did not wish to sign the form in the reception area, Mrs. Cottingham was to put a yellow 'sticky' on the form before giving it to Dr. Maloney. That way it would not escape his notice when he saw the patient that they had not yet signed the Consent Form.

[38] If the patient was prepared to sign the Consent Form without first speaking to Dr. Maloney, they would return the completed Consent Form and the patient history checklist to Mrs. Cottingham who would open a new patient file. If the patient did not wish to sign the consent, Mrs. Cottingham would place the material on the new patient file, flagging the Consent Form as unsigned. Ultimately the patient would be seated in one of the examination rooms and asked to wait for Dr. Maloney.

[39] Mrs. Cottingham's evidence respecting the procedure for having new patients complete the Consent Form was similar. She added, however, that she never pressured a patient to sign the form if they had questions but simply told them they were welcome to speak to Dr. Maloney.

[40] On first meeting a new patient, Dr. Maloney said his standard practice, after engaging in a brief general chat, was to ask them what had brought them in to see him that day. He said he would generally allow the patient to be as expansive as they wished to be in responding and that he might ask some questions to try to get them to elaborate. He said his general practice was then to obtain some past general medical history followed by a history of their presenting complaint. During this process, he would have in front of him the patient history checklist and used it as a guide to the questions he asked. He said that generally he would ask at some point if the new patient had ever before been to see a chiropractor and that if they said they had not, he might tend to be more descriptive in order to ensure that the patient understood what he was talking about.

[41] He said it was further his general practice to discuss the Consent Form with the patient, asking the patient if they understood it or had any questions about it. Although he had no memory of having discussed it with Mrs. Reid, he said that based upon his standard practice, if she had any questions, he would have answered them.

[42] His evidence was that it was his standard practice to start examining a patient only once he had completed the patient's general history and the history of the presenting complaint and was satisfied that he understood the patient's presenting complaint, and only once he had assured himself that the patient understood the Consent Form they had signed.

[43] He described his standard practice respecting the tests he would conduct on a patient presenting with symptoms such as those exhibited by Mrs. Reid on her first visit. After conducting these tests, Dr. Maloney said he would formulate a diagnosis and, if he still was not certain of the diagnosis, would order x-rays or laboratory tests. He said that he would consider ordering x-rays if he was concerned about a disease process such as cancer, a fracture, or about instability in the spine.

[44] His evidence was that once he had formulated a diagnosis, his standard practice was to inform the patient of what he thought the problem was and why it was causing them pain, using models of the body or skeleton and wall charts to illustrate his explanation.

[45] If the patient said they understood what he had said about diagnosis, Dr. Maloney said his standard practice would then be to talk about the treatment he was proposing, again using the models and the charts to describe what joints or muscles he would be dealing with.

[46] In the case of Mrs. Reid, Dr. Maloney said that he diagnosed her with a lumbar spine strain/sprain, and this was clear from her chart. He pointed to a notation at the upper right-hand corner of the chart: "Lep" or "Lsp" SI. Dr. Maloney's evidence was that in his shorthand, this meant lumbar spine strain/sprain, sacroiliac. Relying on his standard practice, Dr. Maloney said that he would have told Mrs. Reid what her diagnosis was.

[47] In cross examination, however, Dr. Maloney did not deny that he had told Dr. Court McAuley, the investigator for the College of Chiropractors who investigated the complaint Mrs. Reid made to the College, that he did not record a diagnosis on Mrs. Reid's chart.

[48] Dr. Maloney also pointed out that Mrs. Reid's chart included a billing statement outlining charges for treatment. It contained the Alberta Health billing code '847' which relates to "sprains and strains of other and unspecified parts of the back", according to the billing code explanatory key. He said this notation was also his recorded diagnosis.

[49] From his review of the chart, Dr. Maloney said based on his diagnosis of Mrs. Reid's problem, he concluded that a diversified side posture adjustment SMT would be the most effective treatment. Relying upon his standard practice, he said that he would explain the diagnosis to the patient tell them that he was not going to jump right into doing the adjustment but instead, would do what he termed a 'dry run' first. He said he would always ask the patient after the 'dry run' how it felt and whether they wanted to proceed with the actual treatment. He said 99.9% did. He then described exactly how the patient was positioned for the treatment and the manipulation he performed. He said his standard practice was always to record the treatments that he did.

[50] When giving evidence about Mrs. Reid's first appointment with him, Dr. Maloney said that after he had told Mrs. Reid his diagnosis and explained his proposed treatment, he then would have said something like this:

> If you're all right with that, we will try this and see. You know we are not going to fix this in one visit likely but we will try and see how this works. Are you okay with that? I am going to explain as we go along. If there's any part of it that you're uncomfortable with then just let me know and there's other things that we can try.

[51] Because he had no memory of this first visit with Marlene Reid, all of this evidence was based upon his standard practice. His assumption was that Mrs. Reid agreed to the SMT treatment because he would not have proceeded had she not.

[52] Relying again upon his standard practice, Dr. Maloney said in a second visit with a new patient with lower back pain radiating into the leg, he would begin by asking the patient how they were feeling and if they had any more questions before proceeding. He would also tell them what he proposed to do, even if that was simply to say he was going to do more of the same.

[53] Dr. Maloney's evidence was that because her chart indicated that Mrs. Reid felt somewhat better after her first adjustment, he did decide that he was going to do more of the same type of treatment on her second visit except that he was going to adjust a few more joints. He said he would have told her this and asked her if she was okay with it and, again, based upon his standard procedure would not have proceeded unless she gave her consent.

[54] Dr. Maloney did have some memory of Mrs. Reid's third visit because it was unusual. He recalled that Mrs. Reid's husband was with her when she arrived around 9 am on March 13. Based upon his notes, he said, Mrs. Reid reported to him that her condition had changed over the weekend. She reported bilateral leg pain beginning on Saturday. Additionally, according to his chart, Mrs. Reid said that her left side now felt fine but that her right leg felt numb and tingling and she had pain down her posterior lateral thigh into her calf and toes. She had also had increased or severe muscle spasm in her right thigh and calf all weekend, according to his chart notes. He said she told him that her foot and leg strength felt normal and reported the ability to climb stairs in terms of having the strength to do so. However, she also reported that she could not feel the step under her foot. She told him, as well, that she had picked up the lumbo-sacral belt he prescribed and it did decrease the pain. His notes indicated that she also said that the belt felt too tight over the hip. She also told him, according to the chart, that she had been taking Tylenol 4 all weekend but it was not helping. Further, according to his notes, she reported difficulty with defecation. Dr. Maloney said these symptoms were a change in clinical presentation and the problem now appeared to be something neurological.

[55] This change in presentation caused him to have Mrs. Cottingham place a call to obtain a verbal report of the x-ray taken on March 7.

[56] He recalled that Mrs. Reid was in quite severe pain when she arrived for the March 13 visit and had to be helped either by her husband alone or by her husband along with Dr. Maloney into one of the treatment rooms. Dr. Maloney says he thought that he told Mrs. Reid that they were now looking at something that might not be what he originally thought it was and that she would likely have to see somebody else for either a surgical consult or at least further imaging. Dr. Maloney recalls that Mrs. Reid asked him if this problem could be fixed and he replied that he would try a couple of gentle things to try to relax the spasm.

[57] Dr. Maloney recalled, as well, telling Mrs. Reid that he was not going to do the side posture push, but instead to try and relax the muscles he would use some upholstered blocks. He described Mrs. Reid as being almost in a panic state because she was in so much pain and said he assumed that she agreed to this procedure, otherwise he would not have gone ahead with it.

[58] Dr. Maloney described the use of wedges on Mrs. Reid, a treatment he described as gentle and designed to take pressure off the sacroiliac joints. He agreed that he might have administered this treatment on a specialized chiropractic table called the Thompson drop table but denied that the drop mechanism on this apparatus had been used to treat Mrs. Reid.

[59] Dr. Maloney also used another specialized chiropractic table called a spinolator table in his treatment of Mrs. Reid on March 13. He described this, as well, as a gentle treatment designed to relax Mrs. Reid and relieve her back spasms.

Informed Consent - Expert Evidence:

Evidence of Dr. Conway:

[60] Dr. Philip Conway was called by the Plaintiff to give expert evidence and was qualified by agreement to give opinion evidence on the degree of care and skill reasonably expected from a normal and prudent chiropractor practicing in Alberta. Dr. Conway holds a Doctor of Chiropractic degree from the Canadian Memorial Chiropractic College in Toronto and is a chiropractor in private practice in Calgary. He has been licensed to practice in Alberta since 1986.

[61] In formulating his opinions, Dr. Conway relied on Dr. Maloney's chart to determine what he had and had not done in the course of his discussions with Mrs. Reid before commencing treatment.

[62] It was Dr. Conway's opinion that when faced with a patient with a history like that of Marlene Reid, a chiropractor must do extensive testing. He said that to meet the standard of care required, a chiropractor must review these test findings with the patient, as well as formulate a diagnosis and discuss this with the patient. In addition he said that a chiropractor must discuss proposed treatment before proceeding. He saw no evidence on Dr. Maloney's chart of a diagnosis, any review of the test findings with Mrs. Reid or any discussion respecting proposed treatment.

[63] Dr. Conway said it was his practice to explain to a patient exactly what he proposed to do in treating them, using words that anyone could understand. In respect to the SMT manipulation that Dr. Maloney's chart indicated he administered on March 10, the L4 and L5 lateral process pushes, Dr. Conway said before doing this adjustment, he would explain to a patient that he was going to try to rotate the vertebra back to its position by pushing on it. Dr. Conway said he would never perform this type of procedure on a patient without first explaining it to them in detail so that they could ask any questions they had and express any concerns. He says this type of discussion is also necessary because the chiropractic association tells chiropractors to have these discussions and the College of Chiropractors encourages them to have these discussions: "so [that] everybody understand[s] what's going on, there's nothing hidden and there's no lack of understanding with the patient – so they don't say he just laid me down and adjusted me. I didn't know what was going on. It's a discussion about their health."

[64] Dr. Conway criticized Dr. Maloney's chart because he said he was unable to determine that he had recorded a diagnosis. In cross examination, it was pointed out to him that the chart also included the billing record which contained the Alberta Health billing code '847' as the diagnosis. Dr. Conway confirmed by reading the codes that this number relates to "sprains and strains of other and unspecified parts of the back".

[65] Dr. Conway was also critical of Dr. Maloney's chart because he could find no reference to a treatment plan being recorded. He said this did not comply with the standards for chiropractors.

Evidence of Dr. Henderson:

[66] Dr. Donald Henderson was called as an expert by the Defendant, and was qualified by agreement to give opinion evidence on the degree of care and skill reasonably expected from a prudent chiropractor practicing in Alberta.

[67] Dr. Henderson has a Doctor of Chiropractic degree from the Canadian Memorial College of Chiropractic ("CMCC"). He has been licensed as a chiropractor in Ontario since 1975 and is in private practice in Toronto. He was also an instructor at CMCC for a number of years and was chair of the consensus committee of chiropractors who developed the 1996 Canadian Chiropractic Association *Clinical Guidelines for Chiropractic Practice in Canada* (*"Glenerin Guidelines"*). He also wrote the preface to these Guidelines.

[68] He was asked how a prudent chiropractor in 2000 would go about obtaining informed consent. In his response, Dr. Henderson made specific reference to the Consent Form signed by Mrs. Reid. He said this:

> It's just the way it's outlined here. It would be provided to the patient. In the course of the examination and history, you would be explaining what the patient's problem is and how you would intend to treat.

[69] In Dr. Henderson's opinion Dr. Maloney did obtain Mrs. Reid's informed consent by having her sign the form that was given to her in the waiting room.

[70] He agreed in cross examination, however, that the statement respecting risks as found in the Consent Form was very general and that before a patient could assess risk, they must know what treatment is proposed. He agreed, as well, that this would particularly be so if that patient was seeing a chiropractor for the first time. He also agreed that before treatment is commenced a chiropractor must provide a patient with a diagnosis and a suggested treatment and that it was also necessary to have a subsequent discussion about risks and benefits and, at least where the patient expresses concern, alternative treatment. He agreed further that one of the options that could or should have been discussed is that of receiving no treatment. He also agreed that the proposed treatment depended on the diagnosis made and the possible risks depended upon the treatment proposed.

[71] It was Dr. Henderson's opinion that Dr. Maloney did correctly diagnose Mrs. Reid at her first visit with lumbar strain, and sacroiliac joint dysfunction. As did Dr. Maloney, Dr. Henderson pointed to the notation in the upper right-hand corner of Mrs. Reid's chart as the

recorded diagnosis. He interpreted Dr. Maloney's notes in the same way as did Dr. Maloney in his evidence: their meaning was lumbar strain and sacroiliac joint dysfunction. Dr. Henderson pointed out, in addition, that this diagnosis was the same as that made by Dr. Zalesky on March 7 and by Dr. Gray on March 13. It was also Dr. Henderson's opinion that Dr. Maloney appropriately changed the diagnosis on March 13 to central canal stenosis and L5-S1 disc involvement (bulge).

[72] Dr. Henderson was asked about the requirement for recording of a diagnosis and was referred by counsel for Dr. Maloney to a document called *Standards of Practice.* In the preamble to his question, counsel stated that these standards are for the Province of Alberta. In the agreed to index to the exhibits binder, the relevant exhibit was referred to as "Chiropractic Profession Standard of Practice, College of Chiropractors of Alberta". However, the document itself was not identified on its face. Paragraph SP 10 of this document says:

> The patient clinical record will clearly and completely demonstrate that the clinician has:
>
> - elicited and recorded an appropriate case history;
> - performed and recorded an appropriate physical examination and other relevant investigations;
> - derived and recorded a diagnosis;
> - derived and recorded an appropriate treatment plan, consistent with the diagnosis and congruent with a treatment protocol taught at a CCE accredited chiropractic institution, (or technique systems approved by the Council/Registrar).

[73] It was Dr. Henderson's view that the *Standards of Practice* does not require that a chiropractor have recorded a diagnosis prior to commencement of treatment. In Dr. Henderson's view, Dr. Maloney met the standard of care in making and recording a diagnosis.

Informed Consent - Findings of Fact:

[74] Mrs. Reid signed the Consent Form in the waiting room of Dr. Maloney's office before she saw him for the first time.

[75] Mrs. Reid agreed that she read the Consent Form before signing it but neither counsel questioned her in respect to what she understood by reading it. Mrs. Reid has a Grade 12 education and had obtained her real estate licence at some point in the past. She had also had some form of post secondary education described as "map making from Northwestern". There was no further detail about what this consisted of or what Northwestern was. Additionally, she has worked in the insurance industry for many years. Based upon her education and her general

experience, I conclude she must have had reasonable ability to read and a reasonable ability to understand English.

[76] In his cross examination, counsel for Dr. Maloney, tried to establish that Mrs. Reid had specific and detailed medical knowledge about her back problems and the treatment proposed. He asked Mrs. Reid if Dr. Maloney 'palpated' her spine and she agreed that he did. He also asked questions about 'sciatica', what she understood it to be and whether the straight leg test that Dr. Maloney did was a test for sciatica. From her answers, however, I concluded that she did not really understand exactly what sciatica was or that the straight leg raise test was a test for sciatica. Although she apparently said at discovery that she had studied anatomy, it appeared from her trial evidence that any understanding she had of the anatomy of leg pain as it related to disc problems was obtained after her surgery. I find that at the time of her first appointment with Dr. Maloney, Mrs. Reid did not have any real knowledge of anatomy. Nor did she have much detailed knowledge of medical terminology. She did not understand what the word 'sciatica' meant.

[77] Mrs. Reid does not have a medical education. I have concluded that in 2000 she did not have detailed medical knowledge and her knowledge of anatomy was likely no more than rudimentary.

[78] Nor am I prepared to find, based upon what Dr. Maloney says is his standard practice, that he asked Mrs. Reid if she understood the Consent Form. There is certainly nothing in her chart to indicate that there was any discussion between Dr. Maloney and Mrs. Reid about the Consent Form. While Mrs. Reid's memory of what occurred over 10 years ago is not perfect, she denied that Dr. Maloney said anything to her about the Consent Form or asked her any questions about what she understood it meant. I find it unlikely that a discussion about the Consent Form would have completely slipped Mrs. Reid's mind had it occurred. This was her first visit with a chiropractor and her lack of memory on this issue was not challenged on cross examination. My impression of Mrs. Reid was that she tried her best to give truthful answers at trial. I find that Dr. Maloney did not ask Mrs. Reid any questions to confirm that she understood the Consent Form.

[79] I do find on the evidence, however, that Dr. Maloney told Mrs Reid what his diagnosis was, even though there is nothing in his chart to indicate that he did so and even though he had no independent recollection of this. There is evidence, nonetheless, that he did so. Dr. Maloney said that once he had formulated a diagnosis, it was his standard practice to tell the patient what it was, using models or charts in his office to illustrate his explanation. Particularly in respect to Mrs. Reid his evidence was that, based upon his standard practice, he believed that he would have explained to her that he thought she was suffering from a sprain/strain to her back. More importantly, however, at trial Mrs. Reid agreed in cross examination that Dr. Maloney had told her what his diagnosis was. Further, Mrs. Reid made a complaint to the ACAC about her treatment by Dr. Maloney sometime in 2001. In an undated statement authored by Mrs. Reid in support of her complaint, she acknowledged that at her initial appointment "Dr. Maloney explained I apparently sprained a muscle in my lower back, pinching a nerve causing discomfort

– sprained/strained injury". This evidence is sufficient for me to conclude that Dr. Maloney did, indeed, tell Mrs. Reid what his diagnosis was.

[80] On the other hand, there is no evidence that Dr. Maloney said anything specifically to Mrs. Reid about risks of treatment or about possible alternatives to treatment. He gave no evidence that it was his standard practice to tell a patient about alternatives to SMT therapy or of the risks of such treatment. Mrs. Reid, as well, gave no evidence that he said anything to her either about risks or about alternative treatments. I find that Dr. Maloney gave Mrs. Reid no information about the risks of treatment or possible alternative treatments.

[81] Dr. Maloney's evidence, again based upon his standard practice, was that he would have explained to her that he thought that the greatest benefit to her could be obtained from the side posture manipulation. It was not clear from his evidence, however, that he said anything other than that or that he told Mrs. Reid he actually proposed to do a side posture manipulation. In particular, there is no evidence that Dr. Maloney said that he intended specifically to target the joints of Mrs. Reid's lower back in doing a side posture manipulation and no evidence that he explained adequately or at all, what this procedure entailed. While he may have asked Mrs. Reid if she had any questions, it is unlikely she had enough information to even be able to formulate a question to ask him.

[82] Nor did Dr. Maloney testify that what he called his standard practice was what he invariably did. He spoke instead of what he normally did. He had no independent memory of what he said or did on either March 9 or March 10 and had to rely only upon his chart notes to determine what was said or done. While his habitual practices may be what he normally did, particularly on March 10, when the evidence was that he was late and rushing to get to the St. Albert Saints' hockey game, it is certainly possible, in my view, that he did not follow his habitual practice. Thus, I do not place much weight on what he called his standard practice, in respect to the information he gave Mrs. Reid about what treatment he intended to administer on March 10, 2000.

[83] Mrs. Reid's evidence was that there was no discussion about applying pressure to her spine – only to her hip bones. It is unlikely, as I have found, that she had sufficient knowledge of anatomy at the time to have any clear understanding that pressure on the hip bones would inevitably also put pressure on her lower back and, in any event, Dr. Maloney did not simply press on her hip bones. His evidence was that on March 10, 2000, he applied specific pressure as well to her L4 and L5 vertebral processes in an attempt to move them.

[84] While Mrs. Reid agreed in cross examination that Dr. Maloney had told her what adjustments he intended to do in order to try to correct the problem he had diagnosed and the purpose of the adjustments he intended to do, she was not asked to elaborate on what she understood about the adjustments he intended to do and their purpose. On the evidence, I conclude that Mrs. Reid thought the adjustment was to pump her hips and the purpose was to loosen the muscles in her back. This understanding was incomplete and inaccurate.

[85] I conclude that Dr. Maloney gave Mrs. Reid only a very brief and general explanation of what treatment he proposed. He may have used the words ‘side posture manipulation’ and may have told her that he was going to ‘pump’ her hips as Mrs. Reid described it. However, he did not give her any clear explanation of what muscles and joints he was targeting and Mrs. Reid did not understand that his goal was to reposition the joints in her lower back. She said that if she had understood this, she would have had questions because of her past history of back problems and I accept that this is so. In my view, that she asked no questions makes it more likely that she did not understand the treatment proposed rather than that she did understand it, in this instance.

[86] I conclude, as well, that Dr. Maloney did not explain, at all, what risks Mrs. Reid faced if she underwent the treatment he proposed and, as I have already said, the wording of the Consent Form, itself, did not aid Mrs. Reid to understand the potential risk.

Informed Consent - The Law and Application of Law to the Facts:

[87] In ***Dickson v. Pinder,*** 2010 ABQB 269, Yamauchi, J. exhaustively reviewed the law respecting informed consent. At para. 68, he summarized what is required of a medical practitioner in order to fulfill the requirement of obtaining informed consent:

> In Canada, a medical practitioner must inform a patient about certain key facts:
>
> 1. the medical practitioner's diagnosis of the patient's condition;
> 2. the prognosis of that condition with and without medical treatment;
> 3. the nature of the proposed medical treatment;
> 4. the risks associated with the proposed medical treatment; and
> 5. the alternatives to the proposed medical treatment, and the advantages and risks of those alternatives.

[88] The case law clearly establishes that a medical practitioner, including a chiropractor, cannot fulfill his duty to obtain informed consent from a patient simply by having the patient sign a written document. It is but one factor for a court to consider in its determination of whether a medical practitioner has complied with his duty to disclose: for example ***Dickson*** at para. 86. The wording of the form of consent at issue in ***Dickson*** differs considerably from that executed by Mrs. Reid. However, the principle is the same.

[89] Given this principle of law, I disagree with Dr. Henderson’s position in evidence in chief, that simply having Mrs. Reid sign the Consent Form was sufficient to fulfill Dr. Maloney’s obligation to obtain her informed consent. Informed consent is not simply a piece of paper. It is a

process or dialogue between patient and chiropractor. Dr. Conway alluded to this in his testimony and Dr. Henderson agreed with this proposition in cross examination. He explained that it was his practice when acting as clinical director at CMCC to explain the test findings to the patient, talk about the treatment plan and explain the treatment before embarking on any form of treatment.

[90] The Consent Form signed by Mrs. Reid was the form recommended by the ACAC. Nonetheless, its wording is very general. It does not even specifically name Dr. Maloney. It refers to the "doctor of chiropractic named below" but the section for the doctor's name is blank and has not been completed. The Consent Form purports generally to give permission for any and all treatment that the chiropractor intends to do while absolving him or her of any responsibility to provide specific or ongoing information. While it mentions possible risks, these risks are also dealt with in a generic fashion and are certainly not specific to a particular diagnosis or to specific types of treatment. Some of the described risks, such as the risk of stroke, may not be relevant to the type of treatment that Mrs. Reid underwent and, in any event, the risks are minimized and called "some very slight risks". It is highly unlikely that simply by reading and signing this Consent Form, Mrs. Reid could be said to have been adequately informed of her diagnosis, the proposed treatment, alternative therapies or the possible risks.

[91] As was pointed out in ***Kern v. Forest,*** 2010 BCSC 938, quoted with approval in ***Malinowski v. Schneider***, 2010 ABQB 734, at para. 66, informed consent requires that a patient know of alternative therapies and risks of treatment. Here, as was the case in ***Kern***, there is no description of alternative treatments in the Consent Form and risks are minimized.

[92] Much evidence was tendered during the course of the trial about the requirements set out in the *Glenerin Guidelines* respecting informed consent. Dr. Conway was critical of Dr. Maloney's chart and his treatment of Mrs. Reid because, in his opinion, the chart did not indicate that Dr. Maloney had adequately recorded a diagnosis or treatment plan and in failing to do so, had failed to comply with the *Glenerin Guidelines* in terms of obtaining Mrs. Reid's informed consent. Dr. Henderson was of the view that Dr. Maloney did comply with these Guidelines.

[93] It was Dr. Conway's view that the Guidelines are consistent with the Alberta Standards of Practice passed by the Council of the ACAC and consistent as well with what is taught in chiropractic colleges.

[94] Dr. Maloney said that he tried to follow the *Glenerin Guidelines* in his practice.

[95] Chapter 1 of the *Glenerin Guidelines* sets out recommendations respecting informed consent. The section of Chapter 1 called 'Overview' says this:

> As a matter of ethics and law there is an obligation, prior to examination and treatment, to disclose any material risk to the patient in order to obtain a valid

> informed consent. This legal duty has been established by case law and, in some provinces, by legislation.

Paragraph 1.1 says this:

> 1.1 Chiropractors must disclose to the patient,..the nature of the proposed treatment or procedures and any material risks including those that may be of a special or unusual nature.

Chapter 7 sets out the recommendations respecting clinical impressions and diagnosis. Paragraphs 7.1 and 7.2 relate to the issue of communication with the patient. They say this:

> 7.1 In the absence of a clear diagnosis a working diagnosis or clinical impression must be made and must be communicated to the patient and recorded prior to treatment
>
> 7.2 Where a diagnosis is made, it must be communicated to the patient and recorded prior to treatment.

[96] In my view, the *Glenerin Guidelines* are not determinative of the standard of care for chiropractors in obtaining informed consent. They say so on their face and clearly indicate that they are advisory only. That this is so, is clearly set out as well in the disclaimer included at the beginning of the Guidelines, which says, in part:

> This document contains guidelines for the practice of chiropractic developed by a commission or consensus group of 35 persons established by the Canadian Chiropractic Association (CCA). It provides part of an ongoing effort by the chiropractic profession to provide improved guidelines for practice.
>
> Clinical guidelines are designed to assist clinicians by providing an analytical framework for the evaluation and treatment of common clinical problems. These guidelines are not intended to replace a clinician's clinical judgment or to establish the only appropriate approach for all patients. They are intended to be flexible. <u>They are not standards of care</u>. [emphasis added] Adherence to them is voluntary. The Association understands that alternative practices are possible and may be preferable under certain clinical conditions. This document does not necessarily reflect the consensus of all members of the CCA, nor is it intended to be an official policy statement of the CCA.
>
> It is not the purpose of this document, which is advisory in nature, to take precedence over federal, provincial or local laws which may affect chiropractic practice.

[97] Compliance with the *Glenerin Guidelines* does not establish that a chiropractor has met the standard of care, just as failure to comply with the Guidelines does not establish that the chiropractor has not met the standard. Adherence to the Guidelines is merely some evidence that the standard of care has been met.

[98] In the same fashion adherence to the ACAC Consent Policy does not establish that a chiropractor has met the standard of care and failure to comply does not establish that the chiropractor has failed to meet the standard.

[99] Both the *Glenerin Guidelines* and the ACAC Consent Policy are subject to interpretation and reasonable people can disagree as to what they mean, as is clear from the fact that Dr. Conway was of the view that Dr. Maloney had not complied with them and Dr. Henderson had the opposite view.

[100] I conclude, that Dr. Maloney did not comply with the *Glenerin Guidelines*, specifically with paragraph 1.1 because he did not disclose to Mrs. Reid "the nature of the proposed treatment or procedures and any material risks".

[101] Unlike the *Glenerin Guidelines*, the ACAC Consent Policy does appear to be binding on members of the chiropractic profession. On my interpretation of this document, Dr. Maloney did not comply with all of the requirements of this policy either. For example the policy requires the chiropractor to inform the patient of **any** potential risk to the patient. Additionally the policy appears to require that the written consent document "disclose, to the patient .., the nature of the proposed treatment or procedure and any potential risks including those that may be of a special or unusual nature".

[102] The Consent Form did not disclose the nature of the treatment being proposed and I have found that Dr. Maloney did not sufficiently explain what the treatment he proposed for Mrs. Reid entailed. Further, I have found that Dr. Maloney gave no information to Mrs. Reid about potential risks, relying instead only upon the very general wording of the Consent Form. As an aside, it is interesting that the form of consent attached to the policy does not, in itself, comply with the written version of this policy. The very general wording of the Consent Form cannot be said to inform a patient of any potential risk. It simply provides some few examples and because it calls these risks "very slight" minimizes the possibility that even these can occur. There may, indeed, be some situations where a procedure involves only "very slight" risk. In other situations, the risk may be much greater.

[103] However, the fact that Dr. Maloney did not comply with all of the requirements of the ACAC Consent Policy is not the end of the inquiry. The test for whether the standard is met is that set out in the case law rather than that set out in either the *Glenerin Guidelines* or the ACAC Consent Policy.

[104] I conclude that Dr. Maloney failed to obtain Mrs. Reid's informed consent in two ways: he failed to advise her sufficiently of the treatment he proposed for what he had diagnosed and he failed to advise her of the risks of this treatment.

[105] Dr. Maloney cannot recall any discussion with Mrs. Reid respecting the Consent Form itself. Nor can he recall if Mrs. Reid asked him any questions about it. He relies on his standard practice to say that if Mrs. Reid had any questions he would have responded to them. There is no notation on his chart that he discussed the Consent Form with Mrs. Reid or that he discussed the risks of the proposed chiropractic treatment or any alternatives. Mrs. Reid, on the other hand, has a clear memory that Dr. Maloney neither explained that he was going to manipulate her back or that he was going to apply any pressure to it. She specified that if he had told her he was going to apply pressure to her back she would have wanted to discuss this because of her two previous back surgeries. Dr. Maloney failed to take any steps to ensure that Mrs. Reid understood the treatment he was proposing or the risks of that treatment.

[106] Dr. Maloney admitted, in discovery evidence read in at trial, that he had no memory of giving Mrs. Reid any information about the dangers or risks of the type of treatment he proposed. He said, however, that insofar as his standard procedure was concerned, he likely would not have advised her of the risks. Mrs. Reid does not recall that he said anything to her about risks either. I find that Dr. Maloney did not discuss potential risks of the treatment with Mrs. Reid.

[107] A chiropractor cannot assume that the patient understands the treatment suggested or the various risks just because she does not ask any questions. A chiropractor must discuss with the patient each material, unusual or special risk, be satisfied that the patient appeared to understand those risks and note that fact on the patient's chart: ***Byciuk v. Hollingsworth***, 2004 ABQB 370, para. 38.

[108] In ***Dickson*** at para. 74, Yamauchi, J. summarized the law in respect to a medical practitioner's duty of disclosure of risk:

> In summary, a medical practitioner must disclose a risk, where the patient would not know of the risk and either:
>
> > (a) the risk is a likely consequence, and the injury that would result is at least a slight injury, or
> >
> > (b) the risk has a serious consequence, such as paralysis or death, even where that risk is uncommon but not unknown.
>
> In other words, the medical practitioner must undertake a "risk assessment" and determine the risks a patient wants and needs to know to decide on their choice of therapy.

Evidence re Risk of Harm:

[109] The next question is whether there was a risk or risks that Dr. Maloney should have discussed with Mrs. Reid.

[110] Both parties tendered expert evidence of the risks posed by chiropractic manipulation. In order to understand this evidence, it is necessary firstly, to have a basic understanding of the anatomy of the disc and of the forces to which an intervertebral disc is subjected. This information was made available at trial from a number of sources. What follows was obtained from the text book *Clinical Biomechanics of the Spine,* (2nd ed)*,* White, A.A.; Panjabi, M.M., Lippincott Williams & Wilkins, ch 1, made exhibit 60 at trial.

[111] An intervertebral disc is comprised of three distinct parts, two of which are important for the purposes of this case: the *nucleus pulposus* ("nucleus") and the *annulus fibrosus* ("annulus"). The nucleus is a centrally located area in the disc and is composed of a very loose and translucent network of fine fibrous strands. A healthy nucleus has been described as having the consistency of gel. The annulus is at the periphery of the nucleus and forms the outer boundary of the disc. It is composed of fibrous tissue in concentric laminated bands, arranged in a helicoid manner so that the fibres run in opposite directions in any two adjacent bands.

[112] Intervertebral discs are subjected to a considerable variety of forces during normal body movement: compression, torsion, and tension being the main ones. Compression forces are caused by the weight of the body itself and these forces are increased by body position (for example there is more compression pressure on an intervertebral disc when a person is sitting than there is when he is standing) and by any activity where dynamic loads are involved (jumping or trauma for example). Forces are also dependent upon time.

[113] Tearing or renting of the annulus permits the material of the nucleus to extrude or protrude through the annulus. The result can be a protruded disc such as that suffered by Mrs. Reid.

[114] Dr. Michel Lavoie gave evidence for the Plaintiff on the issue of causation. He was qualified by consent as an expert in orthopaedic surgery able to give opinion evidence on the diagnosis, causes and treatment of low back pain and lumbar disc disease injury and treatment.

[115] It was Dr. Lavoie's opinion that Mrs. Reid's previous two back surgeries had left her with a weakness in the lower back area and pre-disposed her to further injury at the same site. He said this was because when disc surgery is performed, the disc involved is already abnormal. Further, the surgery itself leaves a rent in the annulus because it does not heal to be as strong as before surgery. Moreover, the pre-existing rent in the annulus sometimes must also be enlarged during surgery to permit the protruding section of the disc to be removed. In Dr. Lavoie's view all of these factors leave a disc that has been operated on pre-disposed to further injury. Further, he said, the effect of the surgery is to pre-dispose adjacent areas of the spine to problems because

the bio-mechanics of the spine are altered by the surgery. It was also Dr. Lavoie's opinion that the manipulations done by Dr. Maloney on Mrs. Reid's back on March 9, at her first appointment, would create a rotational force across the lumbar spine and would increase strain across the lumbar disc and could cause injury. He was of the further opinion that the four manipulations done by Dr. Maloney on Mrs. Reid's second visit on March 10 could also apply pressure to the disc as could the SOT block procedure that Dr. Maloney administered on March 13.

[116] Dr. Bruce Symons, a graduate of the Canadian Memorial Chiropractic College, a practicing chiropractor in Calgary, and with an M.Sc in bio-mechanics, was qualified by consent to give opinion evidence for the Defendants on the bio-mechanics of chiropractic manipulation of the lumbar spine. He gave extensive evidence respecting the forces applied to a sacroiliac joint during a chiropractic manipulation.

[117] Dr. Symons' evidence was that the forces transmitted to the body by a sacroiliac joint manipulation of the type done by Dr. Maloney were likely to be minimal. Although, he indicated that these had not, in fact, been scientifically measured, for technical reasons, it was his opinion that they would likely measure in a range from 250 to 500 Newtons. To illustrate, he gave as an example that a pat on the back would generate about 100 Newtons of force, while someone performing a movement such as that of a Tae Kwon Do Master, breaking a brick with his hand would generate about 3,000 Newtons of force. In his written report, Dr. Symons offered the opinion that a diversified SMT of the type performed by Dr. Maloney "does not load the L4-5 spinal segment to any appreciable extent, and causes minimal rotation on the lumbar spine since the force vector is directed into the pelvis". He said as well, in examination in chief, that he was not aware of any scientific evidence that supports the assumption that sacroiliac SMT causes disc herniations. It was his view that the forces exerted on a spine during a side posture lumbar manipulation would not be sufficient to cause damage to a disc. He offered as well, that it would be anatomically impossible for a side posture manipulation to produce enough rotational force to damage a disc.

[118] In support of his opinion, Dr. Symons pointed to studies using cadaver spinal units consisting of a disc sandwiched between two lumbar vertebra. This research found that the disc would fail physically when rotated to 14.5 degrees. Dr. Symons explained that this study referenced complete gross anatomic failure but admitted that the actual amount of rotation required to cause microscopic tearing is unknown. He said, however, that one could extrapolate to approximate the value, giving as an example the results of a test using a rabbit knee ligament pulled apart in a materials testing machine. He said in this test, the first signs of microscopic damage occur at 25-30% of the strain required for total failure. He then said if one extrapolated these findings and applied them to a degenerated cadaver spine unit, this would mean that the disc would likely begin to fail at as little as 3.6 degrees of rotation. However, he said, studies have shown that an L4-5 spinal segment can rotate only to 3 degrees as an absolute anatomical limit before a bony fracture of the spinal processes would occur. He concluded therefore that "even assuming that Mrs. Reid is one of the most flexible people on the planet and has 3 degrees

of axial rotation in her L4-5 facet joint, it is very unlikely that her already degenerated L4-5 or L5-S1 spinal units could be damaged by Dr. Maloney's lumbo-sacral SMT".

[119] Dr. Symons suggested as well in his report that the side posture SMT manipulation done by Dr. Maloney on the second visit which specifically targeted the L4-5 vertebrae engenders "no more force than sacroiliac SMT".

[120] Dr. Symons also pointed to a study done by someone named Oliphant, first name not provided, in *Safety of Spinal Manipulation in the Treatment of Lumbar Disc Herniation: A Systematic Review & Risk Assessment.* **J Manip Physiol Ther** 2004; 27:197-210. According to Dr. Symons, Oliphant found that the risk of lumbar spine herniation associated with SMT was one in 3.7 million. In oral evidence he added that the odds of being hit by lightning are about 1 in 1 million and so "this result would suggest that there's no causal link at all. It's entirely coincidence".

[121] I prefer the evidence of Dr. Lavoie to that of Dr. Symons on the issue of risk of harm. Dr. Symons' opinion with respect to the forces exerted on a back during spinal manipulation is not based upon fact but upon conjecture.

[122] The research papers he used to form his opinion, reach conclusions that are problematic or unsupportable, in my view.

[123] In respect to the Oliphant article, relied upon by Dr. Symons for his conclusion that statistically, one was more likely to be struck by lightning than to be injured in a chiropractic manipulation, it was suggested to him in cross examination that Oliphant had conducted his "research" by doing an Internet search to find literature. Dr. Symons agreed that this was so. It was suggested to him further that based upon the articles he found on the Internet, Oliphant came to the conclusion that in the last 40 years in the United States, there had been 6.5 billion chiropractic visits. Specifically, Dr. Symons was asked: "I suggest to you that Dr. Oliphant did an Internet search, read some articles, came to the conclusion that there had been 6.5 billion chiropractic visits in the States over 40 years, and then as a result of that same Internet search, came to the conclusion that there had been only 31 proven cases of disc herniation as a result of chiropractic manipulation and divided 31 into 6 ½ billion and came to the conclusion that he did. Would that be right?" He responded; "I don't have the paper in front of me, so I can't verify or deny it." Dr. Symons was able to say almost nothing else about the methodology or statistical analysis used by Oliphant other than to say that he assumed because it was in a peer-reviewed journal that "it had been looked at fairly robustly". He did not have the article in front of him or available when he gave his evidence. Because of these problems, I place no reliance on the Oliphant article insofar as it grounds Dr. Symons' opinion.

[124] Dr. Symons conclusion that disc failure using SMT would be impossible is also based upon research that is problematic. In a 1993 article by Cassidy, David J. et al, called *Side Posture Manipulation for Lumbar Intervertebral Disk Herniation,* relied upon by Dr. Symons, the author

states that tortion (rotation) does not result in disc failure until rotation reaches 22.6 degrees for normal discs and 14.3 degrees for degenerated disc. However, the article is not based upon any experiments or studies actually done by the author and is instead based upon what the author terms "a careful review of the work of Farfan" (an author who wrote an earlier study published in 1973). Cassidy postulates that since rotation of that magnitude in the lumbar spine could only be accomplished by fracture of the posterior joints, and because the disc itself is "well suited to resist rotation ...it is hard to comprehend how the small amounts of rotation introduced during side posture manipulation could damage or irritate a healthy or herniated disk." Cassidy's only other 'proof' for his thesis, however, was "several uncontrolled descriptive studies" which have shown percentages of patients relieved by side posture manipulation and "one published controlled study" by someone named Nwuga which showed that "lumbar side posture rotational manipulation was superior to conventional physiotherapy." The remainder of the article deals with the technique to be used.

[125] Dr. Symons agreed in cross examination that the Cassidy study considered only the force of torsion on the disc and no other forces were present and that a disc in the human body was subject to numerous other forces as well. He also agreed in cross examination that he did not know if any of the discs subjected to the torsion in the study had been operated on, or had annular tears already. Again, given the problems associated with the Cassidy article, I place no reliance upon it as a valid basis for Dr. Symons' opinions.

[126] It is also noteworthy that another article, *Clinical Biomechanics of Spinal Manipulation,* Herzog, Churchill Livingstone, 2000, c. 5, p 193, which article was also made an exhibit, contradicts Dr. Symons' very specific estimates of the amount of force generated in spinal manipulations. According to this article, the theoretic determinations of the forces used by chiropractors have been shown to be faulty and unrealistic and there are problems with all of the attempts at measuring scientifically the forces exerted. The article also points out that there are many possible variations which can affect the amount of force administered to a patient: the problem being treated, manipulative technique, the chiropractor administering the treatment (force can easily differ by a factor of 2 to 4 between chiropractors), and speed. This article also indicates that the force applied is much more variable than Dr. Symons indicated in his testimony. The author spoke of measurements in a side-lying position of a lumbar spine using the Thompson technique observed by the author as being as high as 1200 N with the "highest average thrust duration for treatments of the spine were 5000 Ns". This article also laments that there is a lack of experimental information respecting the movement of vertebrae during chiropractic treatment in conjunction with direct measurements of the treatment forces.

[127] Herzog *et al* also say this at p. 198 of the article:

> One of the most intriguing questions in biomechanics is the so-called "distribution problem". The solution..is aimed at calculating (theoretically) or measuring (experimentally) the forces of internal structures in biologic systems. In the human body these internal structures are represented primarily by the muscles, tendons,

> ligaments, bones, discs and articular cartilage. Knowing at any given time what all of the internal forces in the human body are would be a great help in identifying, for example, the mechanisms underlying movement control and factors responsible for long-term degenerative diseases of the musculo-skeletal system such as osteoarthritis... Unfortunately the distribution problem has not been solved theoretically, even in relatively simple systems... For such a complex system like the human spine, any theoretic results on internal force transmission must be considered and interpreted with great care. Unfortunately to my knowledge, there are no measurements of any internal forces transmitted during spinal manipulative treatments.

[128] My review of the various articles which form the basis for Dr. Symons' opinions, coupled with the problems with the research which were pointed out in cross examination cause me to place no reliance upon Dr. Symons' evidence. Some of his conclusions were directly contradicted by research papers he purported to rely upon and others were supported only by research that Dr. Symons has extrapolated beyond the limits of the research, itself. As a consequence, in my view, it would be unsafe to rely upon Dr. Symons' conclusions.

[129] I find, therefore, based upon the evidence of Dr. Lavoie that chiropractic manipulation of the type undertaken by Dr. Maloney did pose real risks for someone like Mrs. Reid, who had previous back surgeries. I conclude, as well, that Mrs. Reid had no knowledge of the risk and that there were possible serious consequences which, while they may have been uncommon, were not unknown. Dr. Maloney failed to inform her of these risks and in doing so, breached the standard of care and failed to obtain her informed consent.

[130] I conclude, as well, based upon her evidence, that Mrs. Reid would not have consented to treatment had she been adequately informed of the risks. My impression of Mrs. Reid was that she is not an argumentative person and that she tends to defer to authority to some extent. However, her evidence was quite clear. If it had been suggested to her that she risked aggravating her back problems if she underwent treatment, she would have wanted to have a discussion about that before proceeding. She did not say she would not have proceeded, just that she would have wanted further information. In the absence of being satisfied with the further information, I must conclude that she would not have proceeded. I will deal with the issue of whether the spinal manipulation that Mrs. Reid underwent in Dr. Maloney's office caused or contributed to the disc prolapse she suffered, later in these reasons. However, the evidence showed that there was a real risk.

[131] The test is not simply whether Mrs. Reid subjectively would have consented to treatment, however. It is "whether a reasonable person in the circumstances of the plaintiff would have consented to the proposed treatment if all the risks had been disclosed": ***Arndt v. Smith***, [1997] 2 S.C.R. 539 at 554.

[132] The circumstances of Mrs. Reid in March of 2000 were these. She had two previous back surgeries in the same general area of her back that Dr. Maloney now proposed to treat. These, on the evidence of Dr. Lavoie, had left her with a weakness in the lower back area and predisposed her to further injury at the same site. The treatment proposed would create a rotational force across the same area of the spine at which she had weakness and would increase strain across the lumbar disc. A reasonable person in these circumstances would not, in my view, have consented to or undergone chiropractic treatment had he or she been properly informed of the risk.

[133] Mrs. Reid said that on March 10, Dr. Maloney told her that he was going to perform the same treatment as he had previously. Dr. Maloney agreed. His evidence was that he explained to Mrs. Reid that he was "basically" going to do the same thing as he had the previous day except that he was going to adjust a few more joints. Given Mrs. Reid's previous back surgeries, her understandable concerns about any treatment that directly affected her back, and her level of knowledge, the explanation Dr. Maloney gave Mrs. Reid before treating her on March 10, particularly, was insufficient. As a consequence although he said he asked her if she was "okay with that", before he proceeded and she "must have" agreed or he would not have proceeded, Mrs. Reid simply did not have sufficient information to be able to give informed consent.

[134] By not explaining what he was going to do and that there was some risk of disc herniation, Dr. Maloney failed to disclose sufficient information to allow Mrs. Reid to make an informed decision of whether to consent to SMT.

[135] In ***Olsen*** Yamauchi, J also exhaustively canvassed the issue of what a medical practitioner was required to do regarding giving information about alternative remedies. At para. 75, he said this:

> Canadian jurisprudence has established that there is no question on that point. A patient cannot meaningfully choose a therapy unless the medical practitioner places that therapy in context, with alternatives and the consequence of inaction. In ***Zimmer v. Ringrose***, 1981 CarswellAlta 251, 124 D.L.R. (3d) 215 at para. 16 (C.A.) (cited to Carswell) the Alberta Court of Appeal said:
>
> > With a view to revealing any probable or special risks involved, the physician or surgeon should also discuss the benefits to be gained from the recommended treatment or operation, the advantages and disadvantages associated with alternative procedures and the consequences of foregoing treatment. Such a discussion is essential since a patient cannot measure risks in the abstract. To discharge his duty of care, the doctor must give the patient some yardstick against which he can assess the options available to him.

[136] There is no evidence that Dr. Maloney discussed any alternative treatments with Mrs. Reid other than to say generally, if you are not comfortable with proceeding with the SMT, "there's other things that we can try".

[137] However, Mrs. Reid had already tried massage therapy and was still suffering symptoms when she came to see Dr. Maloney. She had tried analgesics and rest, as well. Further, she had a long history of back pain and was well aware that it could be treated with analgesics, physiotherapy, heat and ice. She was also aware that back pain could necessitate surgery. In all of the circumstances, I conclude that Mrs. Reid had sufficient information respecting alternative modes of treatment and, in these specific circumstances, it was not necessary for Dr. Maloney to repeat them. She was also already familiar with the risks and benefits of not treating. Her back pain had continued for a number of weeks before she sought treatment from Dr. Maloney. She knew it would likely resolve eventually without treatment, as it had many times in the past, but she wanted to hasten her recovery if she could. Dr. Maloney did not need to explain any of this to Mrs. Reid as she was already knowledgeable about it. What was missing from the information that Dr. Maloney provided to Mrs. Reid was any information about the risks of the treatment he proposed so that she could balance that against the risks of not treating. Mrs. Reid did not understand when she consented to Dr. Maloney's treatment that she risked making her back problems materially worse.

4. Did Dr. Maloney otherwise meet the standard of care?

[138] Aside from his failure to obtain Mrs. Reid's informed consent to treatment, it was Mrs. Reid's contention that Dr. Maloney breached the standard of care by beginning treatment before he had adequately determined her condition and made a proper diagnosis, and as a consequence had treated her before he, himself, really knew what he was dealing with and what the possible risks or contraindications were. She contends that he also failed to meet the standard of care in failing to properly inform her of what treatment he planned to give her.

Failure to Properly Diagnose:

[139] On the issue of his failure to adequately diagnose her before beginning treatment, Mrs. Reid alleges in particular that Dr. Maloney failed to take an adequate history and to do adequate testing.

Failure to Diagnose - Evidence:

[140] Mrs. Reid testified that she first had back surgery in 1984 when Dr. Narang operated on her for a herniated L4-L5 disc. She said she had further back surgery done by Dr. Glasgow to remove scar tissue resulting from the first surgery. According to Dr. Lavoie's medical report, this second back surgery occurred on February 26, 1988. From his review of the documentation from the General Hospital where the surgery was carried out, Dr. Lavoie described it as surgery to relieve lateral spinal stenosis due to a sequestrated intervertebral disc at L5-S1 on the left.

[141] Mrs. Reid testified that when she made her first appointment with Dr. Maloney, the receptionist advised her that she must obtain x-rays first. She said that it was as a consequence of this advice that she attended at the Grandin Medical Clinic on March 7, 2000 to obtain x-rays of her back. It was her evidence that when she went in to see Dr. Maloney for her first appointment, she told his office that the x-rays were not yet available and that Mrs. Cottingham was asked by Dr. Maloney to check with the Grandin Medical Clinic to determine when they would be available. Dr. Maloney denies that his office requested Mrs. Reid to obtain x-rays. Mrs. Cottingham denies asking Mrs. Reid to obtain x-rays as well.

[142] Mrs. Reid's evidence was that Dr. Maloney completed various diagnostic tests at her first appointment. She recalled being asked to heel/toe walk as well as being asked to straight leg raise. She thought he also checked the height of her hips. She said in direct evidence that he did not conduct any further tests.

[143] Her direct evidence was that at her second appointment Dr. Maloney did not conduct any further tests. However, in cross examination, she agreed that he had done some stretching of her legs and said that he may have done some sort of motion palpation and some examination of her spine and hips with his hands to determine whether there were any other spots where she was having discomfort.

[144] Dr. Maloney's evidence was that he did not see the report respecting the x-rays taken at Dr. Zalaski's request until March 13 according to his chart and the x-ray report read "L spine normal alignment decreased L5-S1 disc space with hypertrophic changes. Facet joints present other disc spaces and bodies normal. SI joints unremarkable." He said that had he received this information on March 10 before her appointment that day, it would not have changed his treatment.

[145] Dr. Maloney's evidence, based upon his standard practice, was that before beginning to treat Mrs. Reid on her second visit, he would have repeated the range of motion test and a motion palpation test. There is no notation on the chart respecting the range of motion test but he testified that this was likely because the results were within normal limits and so based upon his standard practice, he would not have recorded anything. In respect to the palpation of her lower back, he said that he did record results as "MP L5 PR, L4 PL-SPP". He said the notation meant that by motion palpation he had determined that Mrs. Reid had a fixation at L5 at the right transverse process. He said the second part of this notation meant that she has also had a fixation at the L4 transverse process. He said this notation meant either that these two parts of the vertebrae were in a mal-position, one bone in relation to the other or that they lacked proper mobility. He said that when he did the motion palpation of her hip area he also found a left sacroiliac fixation which he recorded as LPI and a right sacroiliac fixation which he recorded as RAS. He said that his findings indicated more stiffness than the day before. This did not surprise him and he explained it thusly:

> There are times where depending on the presentation of an issue like this you can have a change in muscle tone the way that the muscles either respond to the treatment itself or something that somebody has done in the mean time. Sometimes when you mobilize one area other areas become I guess other areas that would have less movement become more apparent.

[146] Dr. Maloney said he did not repeat any of the neurological tests on March 10 because there was no indication this was needed. After that, again based upon his standard practice, he said he would have had her lie on her back and then do some stretching of her gluteal and piriformis muscles. He says this is documented in the chart.

[147] Mrs. Reid did not recall that Dr. Maloney performed any further testing at her third and last appointment. Her husband Dan Reid, who was present at this third appointment, also would not agree that Dr. Maloney examined Mrs. Reid or did any testing of Mrs. Reid before beginning the treatment.

[148] Dr. Maloney's evidence respecting the testing and diagnosis of Mrs. Reid was based upon what he had recorded on her chart as well as his standard practice because he had no independent memory of having examined Mrs. Reid before he started treating her on March 9, 2000 nor of what occurred at her second appointment the following day.

[149] Dr. Maloney's evidence was that his standard practice when he commenced an examination of a patient was to look at the patient's back, having them lift their shirt for this, so that he could do a postural examination. In doing so, he said he was looking for signs of problems such as scoliosis and antalgia, or hunching forward. Then he would have them bend forward to touch their toes, and lean backward and side to side, and twist so that he could check their range of motion. In checking range of motion, he testified that he normally did not use measuring devices but would simply check visually. In respect to these two procedures, he said his general practice was to note on his chart only any abnormalities.

[150] He said, based upon his standard procedure, the fact that he had made no entry on Mrs. Reid's chart in respect to range of motion testing and postural testing meant that all test results were within normal limits, not that he had not done the testing.

[151] Dr. Maloney testified, as well, that he used a number of 'mnemonics' or checklists, taught in chiropractic school, to aid in both the general history taking process and that to obtain a history of the present complaint. For the history of the present complaint he testified that the mnemonic he used was 'MNOPQRST' where 'M' means mechanism of injury, 'N' means neurological symptoms, 'O' is for onset, 'P' means palliative or provocative or what makes it better or worse, 'Q' stands for quality of pain, 'R' means any radiation or referral of the pain and also radiology if there are any x-rays available, 'S' stands for site and severity of the pain and 'T'

stands for the type of pain and timing. He said that for any new patient coming into his clinic in March of 2000 for low back pain and pain in the left leg, he would have used this mnemonic to assist in gathering information.

[152] He said, as well, that if a patient presented, as did Mrs. Reid, with some leg pain, this indicated a possibility of neurological involvement although he said leg pain can also be mechanical. As a result, if a patient presented with leg pain, he would do neurological testing as a standard practice. One of these tests would be the heel walk and toe walk. Dr. Maloney explained that this test was one way to rule out neurological involvement. In Dr. Maloney's view, ruling out neurological involvement was important because if there were symptoms of neurological involvement he would be concerned and would want to "delve deeper". He said he always recorded neurological tests, whether the results were positive or negative, and therefore it was his practice always to record the findings of the heel and toe walk on the patient chart. After completing the heel/toe walk test, Dr. Maloney said his normal practice was to then do what he termed a gross dermatomal or skin sensation test. If a patient presented with lower back pain with leg pain, his standard procedure was to do the dermatomal test from the hips to the toes. Again, he said his standard practice was to record the results of this test whether or not they were negative because it was a neurological test.

[153] Dr. Maloney's notation on Mrs. Reid's chart about the heel/toe walk, was 'WNL b/l'. His evidence was that this meant that Mrs. Reid's response to this test was within normal limits bilaterally. This test result together with the recorded test result from the dermatomal testing caused Dr. Maloney to conclude that it was unlikely that Mrs. Reid's back and upper leg pain resulted from a neurological problem.

[154] Next, he said he would test deep tendon reflexes using a reflex hammer at both the knee and at the ankle. Again, he said he would record the results of this test, whether positive or negative, because it was a neurological test. Dr. Maloney said that his recording of '2/4' in respect to Mrs. Reid's reflexes was his method to record normal reflexes not as Dr. Conway read it, an indication of reduced reflexes.

[155] One of the tests that Dr. Conway suggested that Dr. Maloney should have conducted on Mrs. Reid was the Kemp's test. Dr. Maloney disagreed with Dr. Conway. He said he had been taught that Kemp's test was only a mechanical test to show irritation of the lumbar facet joints and did not show or rule out a bulging disc In cross examination of Dr. Maloney, it was pointed out to him that at least one orthopaedic textbook says that Kemp's test can be used to rule out or show discal involvement and he agreed that this was so.

[156] Dr. Maloney was asked in examination in chief to assume that the neurological tests he had performed on a patient presenting with symptoms such as Mrs. Reid's, were all negative and was asked what he would do next. He responded that he would move around to the back of the patient to do static palpation and a motion palpation of their lower back. The purpose of these two tests was, he said, to look for abnormal motion, position or a fixation in the joints of the

lower back. Again, he said it was his practice to record his findings in respect to motion palpation “because it is related to treatment”.

[157] In examination in chief, he said if he was examining a patient with complaints of lower back and leg pain, he would then perform a straight leg raise test. He described this as being done when the patient is supine (lying on their back). Dr. Maloney said he would grasp each of the patient’s heels in turn and pull the patient’s leg until it was at a 90 degree angle to their body. In doing so, he said he would be looking for symptoms of pain down their leg. He said this was also a neurological test and so, again, he would always record the results.

[158] In respect to his recorded results on Mrs. Reid’s charts, Dr. Maloney said that while his chart notes indicate there was a mild positive reaction into Mrs. Reid’s left thigh when he did the straight leg raise test, he thought that this pointed to a mechanical rather than neurological basis for the symptom because he had lifted her leg beyond 70 degrees. Although, there was no indication on the chart that Mrs. Reid’s leg was raised to 90 degrees as Dr. Maloney testified it was, his testimony was that he would only record the level he was able to raise a patient’s leg to if it was less than 70 degrees.

[159] Dr. Maloney said he would then have the patient lie prone (on their stomach) and would do further static palpation testing on the lower back, generally feeling the muscles, bones and joints and looking for signs of spasm, inflammation or pain as well as instability in any of the joints. He said he would also do stress testing, testing the joints of the lumbar spine and would perform something called the Yeoman’s test, for sacroiliac joint instability, pain, or fixation. He said, again, he would record the results of these tests only if they were positive.

[160] Based on his standard practice, it was Dr. Maloney’s evidence that he had done static palpation and the Yeoman’s test on Mrs. Reid and that the reason there was nothing on the chart to so indicate, was because the results were negative. He said his chart notes also indicated that on March 9, he found no fixations of Mrs. Reid’s lumbar spine when he did motion palpation. Again, he said he had reached this conclusion because nothing was indicated on the chart. He said he did find a fixation of Mrs. Reid’s left sacroiliac joint and this was indicated by his chart notation noted on the chart as ‘MP LPI’. He said he considered this, also, to be indicative of mechanically induced pain in her back.

[161] In cross examination, it was pointed out to him that he said “that appears to be it” when asked at discovery if he had done any testing other than the testing the results of which he recorded in his chart. He said he was telling the truth at the discovery and that his memory was the same at trial as it was at discovery. Again he reiterated that he had no specific memory of the appointment.

[162] Based upon his standard practice, Dr. Maloney said that after he had completed these tests, he would normally be able to formulate a diagnosis. If he still was not certain of the diagnosis, he said, he would order x-rays or other laboratory tests before proceeding to treat. He

said, as well, that it was his practice to record the test results on the patient's chart only after completing all of the tests.

[163] On a patient's second visit, Dr. Maloney said it was his standard practice to do a quick repeat of the static and motion palpation and range of motion tests before commencing treatment. Again, he said it was his practice to only record the results if there was something of significance.

[164] After having completed these various tests at Mrs. Reid's first visit on March 9, Dr. Maloney formed the opinion that Mrs. Reid was suffering from a sprain/strain of her back. This diagnosis was recorded on the chart and explained as "Lsp SI" in the upper left-hand corner of the chart. Dr. Maloney said this meant he had diagnosed lumbar strain and sacroiliac joint dysfunction. He explained that the word 'belt',which appears on the chart immediately after these symbols, was unrelated to the diagnosis and simply indicated that he had prescribed a lumbar belt for Mrs. Reid. It was Dr. Maloney's evidence that while it is not written in the chart, the differential diagnosis would be that Mrs. Reid was suffering from a disc bulge.

[165] Dr. Maloney said he would follow the *Glenerin Guidelines* in determining whether to proceed with spinal manipulation of someone who had previous spinal surgery. The main reason not to proceed was if there was any indication of instability, in his view, but he said poor tolerance to treatment or insufficient healing in the area would be a contra-indication to treatment, as well. He testified the *Glenerin Guidelines* reference to "a relative contraindication depending on clinical science i.e., response, pretest tolerance, or degree of healing" meant that "if somebody was responding negatively to treatment in terms of an exacerbation of symptoms significantly, then that would represent a contraindication if you were dealing with someone who has had prior surgery". He said that a chiroporactor would want to do thorough range of motion testing and stress testing of a joint at a previous surgery site to ensure that there was no instability in an area.

[166] In his view spinal manipulation would not be contraindicated for Mrs. Reid, saying:

> There was no evidence of instability and [Mrs. Reid] had not reported any situation like that to me. The tolerance -- or the stress testing that I would have done, it would have indicated if there was an indication of uncommon pain or hyper-mobility at a joint. That would be a concern...[and in terms of] degree of healing, the surgery was some years prior and there was no indication the joints would have been -- or the surgery itself was having problem healing.

[167] It was Dr. Maloney's evidence that his standard practice after the treatment or treatments had been completed on a second visit, would be to have the patient stand up and repeat the range of motion testing to check how well the treatment had been tolerated. He said he would record any negative reaction to treatment – including if the patient were to cry out in pain during the procedure.

[168] Dr. Maloney said he did not repeat any of the neurological type tests on Mrs. Reid on March 10 at her second visit because there was no indication they were required.

[169] From the Grandin Medical Clinic chart, it is evident that when he saw Mrs. Reid on March 7, 2000, Dr. Zalsky's diagnosis was acute back strain. He specifically found there was no evidence of a prolapsed intervertebral disc. Dr. Zalasky's examination of Mrs. Reid revealed tenderness over the para-spinal muscles and in the lumbar region. Mrs. Reid did not apparently have any radiation of pain into her legs. In his evidence, Dr. Lavoie agreed with Dr. Zalasky's diagnosis based upon the description of symptoms on the chart.

[170] The chart notation from March 13, 2000 when Mrs. Reid saw Dr. Gray, immediately after leaving Dr. Maloney's office, indicates his 'impression' was "severe right lower back spasm". Under diagnosis the number 847.2 appears. This is a diagnostic number used for purposes of Alberta Health care billings and relates to lumbar strain.

Failure to Diagnose - Expert Evidence:

[171] The Plaintiff's expert, Dr. Conway testified that diagnosis was paramount to a chiropractor's treatment and that the purpose for testing a patient during examination was to allow the chiropractor to gather information in order to understand all the mechanisms of injury so that he could formulate a diagnosis. He described the process as one that included gathering physical evidence and examining the patient. He said the diagnostic process involves taking a patient through provocative testing and basic testing including tests for reflexes, sensation, and strength. He described provocative testing as that designed to elicit a response in the patient in order to isolate a problem and said it is accomplished by putting pressure on the site in question. The patient may respond themselves, or the chiropractor may be able to feel that the joint surface is loose or tight.

[172] He said, that a chiropractor should also conduct normal range of motion tests and use the results of both the provocative and range of motion tests along with the clinical presentation and the history to formulate a diagnosis which he described as the most logical diagnosis and a differential diagnosis, which is the most likely alternative diagnosis that cannot be ruled out. It was his view that diagnosis is the most important aspect of chiropractic care since it is only after ruling out a diagnosis for which a treatment would be contraindicated, that a treatment path can be started. As well, if an injury is diagnosed that is beyond the scope and practice of chiropractic, a chiropractor should refer the patient to others and do only palliative or conservative care.

[173] In Mrs. Reid's case, Dr. Conway said four factors caused him to conclude that the diagnosis process required Dr. Mahoney to rule out the possibility of disc problems: she had a noted history of low back pain; she had two previous back surgeries; she had ongoing episodic low back pain; and she had an injury mechanism that would stress the disc and clinical signs that

were consistent with discal involvement. Given this history, it was Dr. Conway's opinion that in Mrs. Reid's case, ruling out a disc would be considered "a standard clinical choice at the outset".

[174] Dr. Conway formed his opinion respecting Mrs. Reid's diagnosis only from a review of Dr. Maloney's chart. He was not present when Mrs. Reid was examined, of course, and did not have the benefit of speaking to Dr. Maloney about the meaning of some of the more cryptic entries on the chart. Based upon this review, it was Dr. Conway's opinion that the diagnostic process which Dr. Maloney underwent in Mrs. Reid's case was deficient in three general areas.

[175] Firstly, it was Dr. Conway's opinion that Dr. Maloney did not record a diagnosis on the chart. Specifically, Dr. Conway was asked to identify the notation "Lsp" (or Lep) and "SI" followed by a comma and the word 'belt' but he did not recognize this as a recorded diagnosis.

[176] Secondly, Dr. Conway was critical of the history Dr. Maloney took, at least insofar as this history was charted and named four deficiencies in the history taken.

[177] In Dr. Conway's view, the chart provided very little information respecting the type of pain Mrs. Reid was experiencing, its duration, and the precise distribution.

[178] He was also critical that while Dr. Maloney's chart indicated that Mrs. Reid had told him she had undergone two previous back surgeries, Dr. Maloney seemed, from the chart, to be uncertain of what type of surgeries these were and whether or not it was disc surgery. It was Dr. Conway's view that in a case of a patient with a history of previous back surgery who, like Mrs. Reid, was unable to provide complete information about the type of surgery, it was imperative to obtain this information from other sources before treatment commenced. This information could be obtained by requesting charts from other care givers or by obtaining copies of previous x-rays. He indicated that it was his own practice to look at x-rays where a patient had previous surgery before commencing treatment. He said that this was not difficult and that if the x-rays were unavailable for some reason, he would take his own. He could see no evidence that this occurred before Dr. Maloney began treatment.

[179] Further, Dr. Conway criticized the history recorded by Dr. Maloney because he saw no reference on the chart to Mrs. Reid having suffered from chronic periodic low back pain. He said this was an important element of her history as it could suggest she suffered from an instability in that area.

[180] Lastly, Dr. Conway was critical of the history recorded by Dr. Maloney because there was little documentation on Mrs. Reid's chart respecting the mechanism of the injury she had suffered when she caught her grandchild. Dr. Maloney said, as well, that there is certain provocative testing that could be done to see if the injury mechanism is the issue. He could see no evidence on the chart that this type of testing had been done.

[181] Beyond his failure to record a diagnosis and to take a proper history, the other major deficiency Dr. Conway found in Dr. Maloney's chart was with respect to diagnostic testing. In some cases, his criticism was that the chart did not adequately document the tests performed on Mrs. Reid. For example, he was critical that Dr. Mahoney did not record at what degree of leg raise, Mrs. Reid experienced pain going into her thigh in the straight leg raise test. However, Dr. Conway's more major criticism was that Dr. Maloney's chart did not indicate that he had performed many of the standard diagnostic tests which Dr. Conway considered necessary in order to reach a differential diagnosis of what Mrs. Reid's problems were before treatment. Dr. Conway first described the tests Dr. Maloney had performed on Mrs. Reid, according to the chart. He said the chart showed that Dr. Maloney had conducted a deep tendon reflexes test. He interpreted Dr. Maloney's notes to mean that Mrs. Reid showed 50% loss of reflexes at both the patella and at the Achilles tendon. It was Dr. Conway's opinion that this was a worrying result in someone with Mrs. Reid's history and would cause him to lean towards a diagnosis of disc involvement. Dr. Conway said he could also see from the chart, that Dr. Maloney had also carried out a sensation test and called it reassuring that Mrs. Reid did not appear to have any loss of sensation in her legs when she first saw Dr. Maloney on March 9. However, Dr. Conway said that this test, in and of itself, did not rule out discal involvement. He also noted that Dr. Maloney had Mrs. Reid do a heel/toe walk and his chart notes indicate that it was within normal limits. He said this test did not indicate a disc problem. However, Dr. Conway could see no evidence on the chart that any other tests were done by Dr. Maloney although in cross examination he agreed that Dr. Maloney may also have done a dermatomal test.

[182] Dr. Conway was not asked specifically whether or not the testing completed by Dr. Maloney was sufficient to enable an appropriate diagnosis to be made of Mrs. Reid's back problems. Nonetheless, viewing his evidence as a whole, it was clearly Dr. Conway's view that the tests completed by Dr. Maloney were insufficient, given Mrs. Reid's presentation, to properly diagnose her and that further tests were warranted before treatment commenced.

[183] In his written report, Dr. Conway named numerous other tests he said could have been done on Mrs. Reid to aid Dr. Maloney in ruling out or confirming whether the problem she had was a disc problem. It was Dr. Conway's opinion that Dr. Maloney completed very few of the standard tests that he ought to have completed. He considered Dr. Maloney's examination to be below standard as a result and his opinion was that Dr. Maloney did not properly diagnose Mrs. Reid before he commenced treating her. Until the tests were done and current x-rays obtained, it was Dr. Conway's view that only conservative palliative therapy should have been attempted.

[184] To sum up, it was Dr. Conway's opinion that given Mrs. Reid's history and her presenting symptoms, it was of the utmost importance to rule out discal involvement before beginning treatment. In was his view, based upon his review of the chart, that Dr. Maloney had not recorded a sufficient history, done sufficient tests, or obtained sufficient other information such as the x-ray results to enable him to rule out discal involvement before he began treatment.

[185] In cross examination, it was pointed out to Dr. Conway that the *Glenerin Guidelines* do not require specific diagnostic tests to be carried out and that a decision respecting which diagnostic tests to perform is a matter of clinical judgment. He agreed. However, as Dr. Conway pointed out in re-examination, while the Guidelines do not specifically mandate that a chiropractor diagnose a patient before commencing treatment, they do specify that even "[i]n the absence of a clear diagnosis a working diagnosis or a clinical impression must be made and communicated to patient and reported prior to treatment": *Glenerin Guidelines*, c. 7.

[186] The Guidelines also say this: "A careful examination is .. necessary to make a correct diagnosis. Responses to pertinent historical queries suggest how the examination should be planned, what course it should take, and what areas may require special consideration." The Guidelines also say that a review of the literature indicates that one of the three goals of the initial clinical examination is "to complete a thorough examination, and determine whether or not the patient needs to be referred for additional diagnostic procedures."

[187] In cross examination, Dr. Conway also agreed that there was no specific examination methodology or history taking methodology mandated either by the Alberta College of Chiropractors or by the Chiropractic Association. However, he said that methodologies for doing a proper examination and taking a proper history were taught at chiropractor college and that unless the chiropractor takes and passes examinations including those which test these skills both from the college in which they are enrolled and in the Board examinations, he or she cannot practice in Alberta.

[188] Dr. Conway commented, as well, that at Mrs. Reid's second visit on March 10, her chart indicates a new symptom – spasm. He said that if he were the treating chiropractor of a patient who showed a new symptom such as spasm after initial treatment, he would want to determine exactly where the spasm was and do further tests before offering further treatment. He did not see from the chart that Dr. Maloney had done this.

[189] Dr. Henderson gave expert evidence for the defence respecting the adequacy of the diagnostic process.

[190] It was Dr. Henderson's opinion, from his review of Dr. Maloney's chart, that Dr. Maloney did properly diagnose Mrs. Reid at the first visit with lumbar strain, and sacroiliac joint dysfunction. He pointed to the notation in the upper right-hand corner of Mrs. Reid's chart, which had been identified by Dr. Maloney as recording his diagnosis. Dr. Henderson interpreted the symbols as recording a diagnosis of lumbar strain and sacroiliac joint dysfunction. Dr. Henderson said, further, that the diagnosis accorded with that made by Dr. Zalasky on March 7 and by Dr. Gray on March 13. Specifically, Dr. Henderson noted that Dr. Gray's diagnosis on March 13 was made on the basis of the straight leg test that he performed on Mrs. Reid and said the results were consistent with those recorded by Dr. Maloney. It was Dr. Henderson's opinion, as well, that Dr. Maloney appropriately changed his diagnosis on March 13, to central canal stenosis and L5-S1 disc involvement (bulge). In cross examination, however, Dr. Henderson agreed that he had not

considered that Mrs. Reid would have been taking Percocet when she was seen by Dr. Gray on March 13 and that might have affected test results as the drug likely lessened the pain she would otherwise have felt when raising her legs.

[191] He also agreed, in cross examination, that a chiropractor must make a diagnosis that is both consistent with the symptoms presented by the patient and which rules out other possible reasons for those symptoms. He agreed further that this was because of the need to consider the possibility that any treatment plan might harm the patient and agreed that, for someone considering doing a spinal manipulation such as SMT, correct diagnosis was even more important than it would be for a physician, for example, who was not planning to do any active manipulation.

[192] When asked whether a disc problem was a contraindication to chiropractic treatment, Dr. Henderson said that a prudent chiropractor does want to make sure that the disc is not involved by performing tests that are available to establish that. He said, however, that the only definitive way to know the nature of a disc problem is with an MRI. He said that just because a patient with disc protrusion does have pain, dysfunction and range of motion difficulties, the diversified high-velocity, low-amplitude specific adjustment, which was the type of adjustment done on Mrs. Reid's back by Dr. Maloney, is not listed as contraindicated *Glenarin Guidelines*. Counsel for Dr. Maloney then quoted to him from the Guidelines on page 141 where it says "In most cases of lumbar disc herniation, the effect of manipulation is to help relieve back pain; to allow for improved ambulation and thus offer greater comfort to the patient." and later:

> "Manipulation for lumbar disc herniation
> when appropriately applied is a safe
> treatment in cases **where there are no**
> **signs of increasing neurological deficit**
> or cauda equina syndrome" [emphasis added]

[193] It was Dr. Henderson's view that the Guideline restrictions did not really apply to Mrs. Reid since she had not been diagnosed with anything other than lumbar strain/sprain. In respect to the question about whether spinal surgery was a contraindiction to performing a diversified high-velocity, low-amplitude specific adjustment, Dr. Henderson again quoted from the Guidelines: "Post-surgical joint or segments with no evidence of instability are not a contraindication to high-velocity thrust procedures **but may represent a relative contraindication depending on clinical signs.**" [emphasis added]. He said that while a chiropractor should not treat a back surgery patient right after surgery, if surgery had occurred 12 and 16 years prior to the appointment (as was the case with Mrs. Reid), an adjustment would not be contraindicated. He was then asked specifically about the Guideline provision bolded above and said that clinical signs included the response to previous treatment.

[194] In his first written report, Dr. Henderson did not specifically address the issue of whether the testing that Dr. Maloney had recorded as being done in Mrs. Reid's case, was sufficient to

enable an appropriate diagnosis. However, in his rebuttal report, Dr. Henderson specifically outlined the tests that, in his opinion, Dr. Maloney had charted as being completed and commented that these tests were "adequate enough to determine discal involvement." It was also Dr. Henderson's view that many of the tests suggested by Dr. Conway were essentially repetitive and would not give much new information. As far as Dr. Henderson was concerned, Dr. Maloney did the priority tests and these were sufficient.

[195] Dr. Henderson's opinion was that Dr. Maloney's treatment of Mrs. Reid would not have changed even if he had reviewed the x-rays before treating her so, although it could be argued that he should have obtained and reviewed the x-rays before commencing treatment, it made no difference in this case. In Dr. Henderson's view "[t]here [was] no added clinical information on the X-rays that would contraindicate Dr. Maloney's treatment as described."

[196] It was also Dr. Henderson's opinion that Dr. Maloney obtained an adequate history to enable him to make a diagnosis.

[197] He agreed, in cross examination, that it would be helpful for the chiropractor to have information about the previous spinal surgeries where a chiropractor was considering doing spinal manipulation on a patient with a history of spinal surgery. He said he would not particularly consider an investigation of the potential weakness of a disc or a back just because the patient had had previous back surgery, adding the caveat "unless it was something that the patient had concern over, presented to the office and said, "Listen, I've got prior surgeries, I'm not sure how strong my disc is, and put the questions to me like that". He agreed as well that he would want to know about previous incidences of lower back pain in considering treatment options for a patient.

[198] Dr. Henderson was asked a number of questions about charting of test results and agreed that a prudent chiropractor should chart the level of leg raise at which pain was felt into the thigh. He also agreed that it was good clinical practice to record both positive and negative or normal test results when charting results of testing done, after the *Glenerin Guidelines* provision which specifically says this was pointed out to him in cross examination .

[199] On the subject of recording of a diagnosis and treatment plan, Dr. Henderson was referred, in examination in chief, to SP 10 of the document called Standards of Practice, which reads as follows:

> The patient clinical record will clearly and completely demonstrate that the clinician has:
> elicited and recorded an appropriate case history;
> performed and recorded an appropriate physical examination and other relevant investigations;
> derived and recorded a diagnosis;

> derived and recorded an appropriate treatment plan, consistent with the diagnosis and congruent with a treatment protocol taught at a CCE accredited chiropractic institution, (or technique systems approved by the Council/Registrar)

[200] Dr. Henderson's opinion was that this provision does not require that a chiropractor have recorded a diagnosis prior to commencement of treatment.

[201] Dr. Lavoie also reviewed Dr. Maloney's chart. It was his opinion, based on the chart, that Dr. Maloney did not consider the possibility of disc herniation as the cause of Mrs. Reid's pain when he first examined her on March 9.

Failure to Properly Diagnose -Findings of Fact:

[202] Dr. Maloney's chart for Mrs. Reid was less than ideal. His recorded history provided little detail. For example, he did not indicate what type of pain Mrs. Reid described and there is little information about the mechanism of the injury she complained of.

[203] I do not accept Dr. Maloney's evidence that there were a number of diagnostic tests he performed on Mrs. Reid that he did not chart because it was his standard practice not to record negative results except in the case of neurological tests. For example, Dr. Maloney testified that he performed the static palpation and the Yeoman's test on Mrs. Reid and the results must have been negative and that is why there is nothing on her chart to indicate that these were done.

[204] My impression of Dr. Maloney's evidence was that his classification of what was a neurological test versus what was a non-neurological test was quite arbitrary. In his report, Dr. Conway described the Yeoman's test as "a standard orthopaedic test for the determination of a sacroiliac joint lesion". Dr. Maloney did not disagree. If that is correct, and there was no evidence to the contrary, I cannot understand why this test would not be termed a neurological test and, if so, given what Dr. Maloney says was his standard practice, why the results would not have been recorded, whether or not they were positive.

[205] Dr. Maloney bases his testimony about what tests he performed on Mrs. Reid on his standard practice and his chart entries because he has no independent memory of her first or second visit. In other words, there is no evidence, other than what Dr. Maloney says was his standard practice, that such unrecorded tests were performed. Dr. Maloney did not testify that his standard practice was his invariable practice and I note that Mrs. Reid recalls Dr. Maloney doing only a few diagnostic tests on her first visit and recalls almost none being done on her second visit. There is not sufficient evidence for me to accept that Dr. Maloney did any of the tests he said it was his standard practice to do but not to record unless they were positive.

[206] In particular, I do not accept that Dr. Maloney performed the test termed a heel/toe stand. In his testimony, Dr. Henderson particularly referenced this test explaining "if somebody has a severe nerve compression.. they may have a floppy foot. They may not be able to stand on their

toes [so Dr. Maloney conducted this test to ensure] that there wasn't any motor deficit in the lower limbs". However, there is no evidence that Dr. Maloney did, in fact, perform this test and I conclude that Dr. Henderson was in error in thinking that he had.

[207] As well, some of Dr. Maloney's evidence in respect to testing he had done was contradictory. For example, Dr. Maloney said in direct examination that because there was no recording of the results of the dermatomal test on Mrs. Reid's chart, this meant that Mrs. Reid's dermatomal testing was negative. However, as was pointed out to him in cross examination, what he had written in a letter to Mr. and Mrs. Reid in March of 2000, sent at their request seemed to contradict this. In the letter he said: "the area of numbness was localized mostly to her left buttock and thigh,...". Dr. Maloney explained this inconsistency by saying he thought what was in the letter was a mistake, made in the rush to put the letter together. He also said, however, that the contents of the letter was his recollection at the time.

[208] In the result, I conclude that Dr. Maloney conducted only those tests upon Mrs. Reid for which he charted the results.

[209] Nor do I accept that Dr. Maloney followed his standard practice after treatment on a second visit by a patient of having the patient stand up after the treatment and repeating the range of motion testing to check for how well the treatment had been tolerated. Mrs. Reid says he did not and left while she was still on the examination table. Dr. Maloney was in a hurry to get to the hockey game on March 10. I accept Mrs. Reid's evidence over that of Dr. Maloney. She has a specific recall of the appointment; he does not. There is nothing on Dr. Maloney's chart to indicate that any testing was done and he was in a hurry. What would otherwise be standard practice may not occur when someone is in a rush.

[210] However, I do accept the evidence of Dr. Maloney that Mrs. Reid did not show any marked reduction in deep tendon reflexes at either the patella or in the Achilles tendon region, when he tested these at her first appointment, notwithstanding that Dr. Conway understood his chart to indicate that Mrs. Reid showed a 50% deficit. Given Dr. Conway's evidence, it may be that Dr. Maloney did not use the standard method of charting these test results. However, in direct evidence, Dr. Maloney explained what he meant when he recorded the numbers "2/4" as being Mrs. Reid's reflexes, it was his method of recording normal reflexes, not as Dr. Conway read it, an indication of a 50% reduction in normal reflexes. When this evidence was put to Dr. Conway, although he expressed surprise at Dr. Maloney's method of recording these results, he did not indicate that the notation could not mean what Dr. Maloney said it did. Further, the test result as explained by Dr. Maloney is consistent with other evidence. Mrs. Reid was examined on March 7 by Dr. Zalasky and his chart notes do not record any such deficit.

[211] Dr. Maloney did not obtain or read the x-rays of Mrs. Reid's lower back that were taken on March 7, 2000 before he diagnosed her or commenced treatment. I note that the report of this x-ray result indicates that the radiologist reading the x-ray was of the opinion that Mrs. Reid had degenerative disc disease at the L5-S1 level of her spine because of intervertebral disc space

narrowing and hypertrophic changes at that same level. However, based upon the evidence of both Dr. Henderson and Dr. Lavoie, I am satisfied that the limitations of x-ray imaging are such that an x-ray would not show any disc bulging or protrusion even if that had existed at the time. I, therefore, accept the evidence of Dr. Henderson. The x-ray results would themselves not have aided Dr. Maloney in his diagnosis.

[212] I prefer Dr. Conway's opinion evidence, however, as to whether Dr. Maloney could and should have obtained further information respecting Mrs. Reid's previous surgeries before commencing treatment. While Dr. Henderson was of the view that such information was not necessary except in specific circumstances, Dr. Henderson's evidence was hardly a ringing endorsement of Dr. Maloney's testing procedure. He merely said that Dr. Maloney did the "priority" tests and called his testing procedure "sufficient", offering few specific reasons for why he concluded this was so. On the other hand Dr. Conway gave a number of sound reasons for his opinion that such information would be helpful and even necessary if a chiropractor is considering doing spinal manipulation of a patient, in the same general area of the previous surgery.

[213] On the evidence of Dr. Conway, it is also apparent that there were a number of diagnostic tests available to chiropractors which Dr. Maloney did not do and which might have aided him in his diagnosis of Mrs. Reid's presenting complaint.

[214] While the recorded diagnosis on the chart was cryptic, I am satisfied based upon the evidence of Dr. Maloney and of Dr. Henderson that Dr. Maloney did diagnose Mrs. Reid with a lumbar sprain/strain and that he did record this diagnosis on Mrs. Reid. However, as he admitted, Dr. Maloney did not record a differential diagnosis.

Failure to Properly Diagnose – the Law and Application of the Law to the Facts:

[215] The standard of care imposed upon a practitioner, including a chiropractor, applies not only to the treatment given a patient but also to his diagnosis: ***Gibbons et al. v. Harris*** [1924] A.J. No. 49 (Alta C.A.).

[216] A physician is under a duty to exercise reasonable care, skill and judgment in coming to a diagnosis. Implicit in the duty to diagnose is the requirement to take a careful history. Picard and Robertson put it thusly at 300-1:

> Having undertaken the care of a patient, a doctor is under a duty to make a diagnosis, and to advise the patient of it. ... The duty to diagnose is not as onerous as it might seem. A doctor is not expected to be infallible, only to exercise reasonable care, skill and judgment in coming to a diagnosis. If this is done, the doctor will not be held liable even if the diagnosis is mistaken.

[217] This statement (and precursors to it from earlier editions) has been accepted in a number of cases, including ***Rose v. Dujon*** (1990), 108 A.R. 352 (Q.B.), in which Fraser, J. (as she then was) made the following comments :

> ..[I]t does not automatically follow that the mis-diagnosis of a patient's condition is tantamount to negligence on the part of the physician. However, such mis-diagnosis will be regarded as an indication of negligence if the physician failed to resort to whatever reasonable tests, equipment or assistance were available to him.

[218] As Fraser, J. also noted in ***Rose***, "[i]mplicit in the duty to diagnose is the duty to take a careful and thorough history". This proposition is also supported by Picard and Robertson, who comment as follows at p. 302-3:

> ..a thorough history, proper examination, appropriate tests, and consultations with colleagues and specialists where necessary, are clearly basic to a proper diagnosis. A reasonable doctor should also heed a patient's complaints during treatment for they may be harbingers of change in condition.

[219] Although Dr. Maloney's charting was deficient and it appears the history he took from Mrs. Reid was incomplete and although he failed to obtain her x-ray results when she first came to see him and before he commenced treatment, it is not alleged that he breached his duty of care by taking an inadequate history or not adequately charting his findings or treatment. Such evidence is only relevant to the issue if it goes to prove that Dr. Maloney did not adequately diagnose Mrs. Reid before commencing treatment.

[220] Dr. Maloney's diagnosis of Mrs. Reid was consistent with that of both Dr. Zalasky on March 7 and of Dr. Gray on March 13. Dr. Lavoie, as well, said in his evidence that he agreed with the diagnosis made by Dr. Zalasky based upon his review of Dr. Zalasky's chart. In my view, based upon all of this evidence, Dr. Maloney cannot be faulted for the provisional diagnosis he made of Mrs. Reid's back problem on March 9, 2000, whether or not it was correct. He exercised the requisite reasonable care, skill and judgment in coming to his diagnosis and was not negligent.

[221] However, I accept the opinion evidence of Dr. Conway and of Dr. Henderson in cross examination that where, as was the case here, a chiropractor intends to treat a patient by manipulating her spine, the duty of reasonable care extends beyond merely making a provisional diagnosis. Where a chiropractor intends to actively treat a patient using SMT, and where a patient has a history of discal back surgery, a chiropractor has a duty to rule out disc problems as a reason for the symptoms presented by the patient before commencing anything but conservative palliative treatment such as application of ice, because of the risk of harm to the patient.

[222] Mrs. Reid was in pain and looking to Dr. Maloney for help at her first appointment on March 9. Nonetheless, there was no urgency in treating Mrs. Reid. I accept Dr. Conway's opinion

that where a patient with a history of previous back surgery is unable to provide complete information about the type of surgery, it was imperative to obtain this information from other sources before treatment commenced. In my view, Dr. Maloney's failure to obtain details of Mrs. Reid's previous back surgeries, coupled with his failure to complete more extensive testing and examination, resulted in his not having enough information to enable him to rule out lumbar disc herniation as the cause of Mrs. Reid's pain.

[223] Dr. Maloney failed, further, to mention on the chart that Mrs. Reid had suffered from periodic low back pain. Mrs. Reid had underlined 'back ache' on the patient history form she completed before first seeing Dr. Maloney. There is no evidence that he questioned her about this or had any real idea of what Mrs. Reid's history of episodic back pain had been.

[224] Given these various gaps in the information he had, Dr. Maloney could not and did not rule out the possibility of disc involvement on March 9, 2000. He could not have known much, if anything, about the general health of Mrs. Reid's back. He did not know that Mrs. Reid had a history of degenerative disc disease and osteoarthritis and so could not have known if she was predisposed to spinal stenosis or disc injury. I consider it significant that Dr. Maloney did not record discal involvement as a differential diagnosis on Mrs. Reid's chart. Nor does his chart say anything about a finding of a history of degenerative disc disease or osteoarthritis. While Dr. Maloney said in evidence that his differential diagnosis was discal involvement, he has no memory of his first visit with Mrs. Reid and absent something on the chart to indicate that the question of discal involvement was on his mind, I am not prepared to accept that this was his differential diagnosis and he considered this risk or the risk that Mrs. Reid had a history of degenerative disc disease and osteoarthritis in his treatment of Mrs. Reid, simply on the basis of what his standard practice was.

[225] The lack of information did not allow Dr. Maloney to rule out discal involvement for the symptoms experienced by Mrs. Reid on March 9; this lack of information also disabled him from properly evaluating the risk of treating Mrs. Reid. Thus, in my view, it was negligent of Dr. Maloney to commence treatment of her, as he did on March 9, 2000. I accept the evidence of Dr. Henderson, that even obtaining further information would not have permitted Dr. Maloney to make a definitive diagnosis of discal involvement unless he sent her for an MRI. However, it would have provided him with much information about the general health of Mrs. Reid's spine and would have allowed him to better assess the risks of treatment and explain these to Mrs. Reid.

[226] Dr. Maloney's initial primary diagnosis, that Mrs. Reid suffered from a sprain/strain of the back, was not negligent, given her symptoms and the information Dr. Maloney had. However, I conclude that Dr. Maloney was negligent in not attempting to obtain further information in order to enable him to rule out discal involvement or to determine the general health of Mrs. Reid's spine. In failing to do so, Dr. Maloney did not exercise reasonable care, skill and judgment in considering a differential diagnosis and in attempting to rule it out. He also did not exercise

reasonable care, skill and judgment in determining and evaluating the risks that treating someone with a history of degenerative disc disease and osteoarthritis would present.

[227] I am satisfied, further that it was even more risky for Dr. Maloney to continue to treat Mrs. Reid on March 10 after she reported a change in symptoms that is spasming (left thigh and postero-lateral calf) after her first treatment. Again, I accept Dr. Conway's evidence in this regard.

5. Causation – Was Dr. Maloney's treatment of Mrs. Reid the actual and legal cause of her injuries?

[228] The Plaintiff, Marlene Reid, alleges that the Defendant Dr. Maloney's treatment of her in March of 2000 caused the disc herniation at the L4-S5 level that she had to have corrected by two surgeries later in 2000.

Causation - Evidence:

[229] Mrs. Reid saw Dr. Maloney three times*:* March 9, 10 and 13, 2000. He treated her on all three occasions.

[230] Mrs. Reid said she felt somewhat better after her first treatment by Dr. Maloney. However, problems started to develop when he treated her the second time on March 10, 2000. It was her evidence that when Dr. Maloney pushed on her hips on March 10, she felt immediately as if the air had been pushed out of her lungs and felt a hot burning pain in the middle of her lower back just above her tail bone. She said she gasped and looked over at him, asking him what happened. He told her that he had 'cracked' her lower back.

[231] Dr. Maloney's evidence, based upon his chart, was that the adjustment he did on Mrs. Reid on March 9 was an attempt to release the fixation of her left sacroiliac joint and restore normal mobility. He said this must have been a successful manipulation because there was nothing recorded on Mrs. Reid's chart to indicate otherwise.

[232] Dr. Maloney also gave evidence based upon the chart and his standard procedure with reference to Mrs. Reid's second visit on March 10. From the chart it appeared to him that Mrs. Reid indicated that she had posterior lateral left thigh and calf spasms on the night of March 9-10 after her first adjustment. His chart notation was " [l]eft thigh and calf (post/lat) spasms at night". If these spasms were transient and not present at the appointment Dr. Maloney said he would not have been particularly concerned. From the chart, he did not think that Mrs. Reid reported that these spasms were still present at the time of her second visit. However, as was pointed out to him in cross examination, in his March 24, 2000 letter to Mr. and Mrs. Reid, Dr. Maloney wrote that Mrs. Reid had reported on March 10 having suffered spasms for a good part of the night. As well, Dr. Maloney did not disagree that he had told Dr. McAuley, the investigator for the College of

Chiropractors, "[w]ith regard to Mrs. Reid's question about her left leg and calf being in spasm, Dr. Maloney states that this was more of a comment on what he found from an objective sense, not necessarily what she reported subjectively", as reported by Dr. McAuley. Dr. Maloney agreed that if a patient reported spasms for a good part of the night and they were objectively present when he examined her the next day, these could not be called transient or transitory.

[233] Dr. Maloney described Mrs. Reid's SMT treatment at the second appointment. The purpose of the treatment was to try to restore normal movement to the joints that the L5 and L4 vertebrae are in contact with by using a side push type of manipulation. He said he told Mrs. Reid that he was basically going to do the same thing as he had the day before except that he was going to adjust a few more joints. He said he pushed both the L4 and L5 vertebrae processes in Mrs. Reid's back from both the left and right sides in an attempt to move them. His chart notes indicate that after these manipulations, he had Mrs. Reid roll onto her back and he stretched her buttock musculature: the gluteus and piriformis muscles. He said this was noted on his chart as "PNF B/L, glutes/piriformis". He explained that PNF stands for proprioceptive neuro-facilitation and described this as a type of facilitated stretching. He said that he would have to assume that these manipulations went well because nothing negative was noted. In reference to Mrs. Reid's comment that he told her he had 'cracked' her back, Dr. Maloney said that he would never use such a term in relation to treatment since it had a pejorative connotation in chiropractic circles.

[234] The entire chart notation for March 10 reads as follows:

> L thigh & calf (post/lat) spasms @ night.
> MP-L5PR, L4 PR, L4 PL-SPP, LPI/RAS-SPP. PNFB/L gluts/perform
> (No L/S belt yet)

[235] Mrs. Reid's evidence was that, Dr. Maloney told her, after the second treatment, that she would feel some discomfort, stiffness or soreness, because the back had to reposition itself. She said he advised her to continue to use ice. He then gave her his business card after putting his home phone number on the back. March 10 was a Friday and Dr. Maloney invited her to call him over the weekend if she needed him. She said he then left to get to the hockey game while she was still on the chiropractic table.

[236] Immediately after the treatment, Mrs. Reid said her lower back and legs felt weak and the burning pain in her lower back continued. She also had pain in her right hip. She got off the chiropractic table but described herself as 'waddling' out to the car because her hip and back hurt and her legs and back felt so weak. Her car has a standard transmission and Mrs. Reid said that she drove home in second gear because she could not push in the clutch.

[237] When she got home, her husband was already there. Her evidence was that she told him she was not feeling well and that she needed a hot bath and a couple of Tylenol. Mr. Reid did not think his wife was walking normally when he saw her and said she seemed to be limping. He helped her into the bath. Mrs. Reid said the muscles in her right thigh were in spasm while she

was in the bath tub. She could see them moving. Mr. Reid said he also thought he saw the muscles in the back of Mrs. Reid's thigh and in her calf moving when she was in the bathtub.

[238] When she got out of the bath, Mrs. Reid's evidence was that she lay down and went to sleep. She felt that the spasms lessened when she lay down. She thought she slept all night but said her husband told her that she tossed and turned. She did recall her leg hurt and she felt as though the mattress was not comfortable during the night. Mr. Reid confirmed that his wife had had a hard time falling asleep that night and did not sleep well, in his opinion.

[239] The next morning, Saturday March 11, Mrs. Reid recalled moving to a reclining love seat with her husband's help after she got out of bed. He had to work that day but got her more Tylenol and an ice pack as well as some coffee before he left. She said her hip continued to feel sore and the muscle spasms in her right thigh continued.

[240] Mr. Reid described helping his wife to get back into the bathtub that morning before he left for work. According to him, Mrs. Reid complained that the little toe on her right foot felt like it was broken. He felt her foot and said it felt hot. Mr. Reid agreed that when he left for work, he left her on the love seat with the remote control, some Tylenol and instructions to call him if she needed help. He knew that his stepdaughter Kerrie would come later that day to help her mother to obtain the belt that Dr. Maloney had recommended.

[241] Mrs. Reid testified that her daughter did call and she and her daughter agreed to go shopping. Mrs. Reid said she did this because she felt the need to walk, notwithstanding her pain. Her daughter, who was eight months pregnant at the time, had to help Mrs. Reid to put on her shoes and help her out to her van and Mrs. Reid said she felt stiff and sore and her hip hurt. They went to a supermarket where her daughter got a grocery cart for herself and one, as well, for Mrs. Reid who said she asked for one because she thought she could use it to help her walk. She wanted to pick up the belt that Dr. Maloney had prescribed for her and so went first to the pharmacy. She was unable to obtain the belt but continued shopping.

[242] A short while later, having gone down one or two grocery aisles, Mrs. Reid said her right leg gave way. She said she lost feeling in the entire leg from the buttock to the hip and had to hold onto the grocery cart to keep from falling. They did not finish their shopping and simply took the carts to the door and left them there. Mrs. Reid's daughter helped her back into the van and took her home. Mrs. Reid said that she was able to lock the leg so that it would hold her weight and this enabled her to get back into the vehicle. Mrs. Reid estimated that they spent about one half hour in total in the store. After taking her mother home, the daughter went to another store and got the recommended belt.

[243] Mrs. Reid testified that the pain in her right hip continued when she got home and it remained very serious. Her daughter got her an ice pack and some Tylenol 3s. After returning from shopping, Mrs. Reid said she did nothing else but sit on the recliner with an ice pack until her husband got home. After that, she got back into the bath tub again. She said that her entire

right leg was in spasm by then and her hip was very painful. Notwithstanding the pain she was in, she did not try to call Dr. Maloney; nor did she call the Grandin Clinic emergency after hours number or call or go into the emergency department of the local hospital.

[244] That evening, according to her husband, Mrs. Reid was still in much pain and still unable to walk without assistance. She was no better the next morning and, again, Mr. Reid had to work. He said he called Dr. Maloney, at the home number Dr. Maloney had given to Mrs. Reid, but had to leave a message. Dr. Maloney did not call back. Mr. Reid cut his work short and was home by noon. He thought his wife's condition had deteriorated. He tried to call Dr. Maloney again but, again, got the machine. He says he described in the message he left what Mrs. Reid had been going through and told Dr. Maloney they would be at his office at 9:00 the next morning.

[245] Mrs. Reid's evidence was that she slept on the floor on the night of March 11. The next morning, she was no better but again felt the need to walk. She got dressed and she and her husband went out but got only as far as the next door neighbour's before they turned back because she was unable to walk further. On her evidence, other symptoms that she suffered on Sunday, included an inability to void or have a bowel movement. She felt that her hip, her outer thigh and her groin were numb. She tried to go to bed on the Sunday night but found it too uncomfortable and spent most of the night on the recliner in the living room. She recalled that her husband left a number of telephone messages for Dr. Maloney with the last one telling Dr. Maloney that they would be at his office on Monday morning.

[246] Monday morning, March 13, Mr. Reid said he helped Mrs. Reid get dressed and drove her to Dr. Maloney's office. He felt he had to support her to get out of the car and walk into Dr. Maloney's office. Dr. Maloney was waiting for them and helped him to get Mrs. Reid into one of the treatment rooms. He asked what happened and Mrs. Reid explained about the pain in her back and her leg and told him that the little toe on her right foot felt like it was broken.

[247] On Mrs. Reid's evidence, her right leg, hip and the right side of her back remained very sore on Monday when they went back to Dr. Maloney's office. She said Dr. Maloney was in the reception area when she got there and he and her husband helped her into an examination room and onto the examination table. She did not recall that Dr. Maloney conducted any further tests but in cross examination agreed it was possible he did although she did not remember this.

[248] Mrs. Reid's memory of the treatment that Dr. Maloney administered on March 13 was as follows. He put wedges under her hips while she was lying on her back. He told her that he was repositioning her spine. He then put his hands on her hip bones while the wedges were under her hips. She felt her back snap back and felt the table drop beneath her accompanied by a sound she described as a "swish" when the table moved. After Dr. Maloney did this once he told her that it had not worked, re-positioned the blocks and did it again. In cross examination, she agreed however that it was possible that, Dr. Maloney might have been simply trying various positions with the wedges to find one that was comfortable and did not repeat the treatment. However when counsel for Dr. Maloney suggested that pressure was applied only once, Mrs. Reid was adamant,

that he had pressed down on her hips twice and she felt pain. Mrs. Reid agreed however when Defence Counsel suggested that the pressure applied could have been light. After Dr. Maloney performed this procedure Mrs. Reid said her pain was intense.

[249] Mr. Reid also described the treatment administered to Mrs. Reid on March 13. He described the wedges as being small and about 2 ½ inches in height and said variously that the wedges went under Mrs. Reid's hips or were placed on her 'sides'. He said Dr. Maloney pushed down on Mrs. Reid's hips after placing the wedges and he heard a "swooshing" sound and saw her hips move. He said Mrs. Reid was crying by this time and yelling that it hurt. Dr. Maloney repeated the procedure, according to Mr. Reid, replacing the wedges and pushed down again. Again Mr. Reid heard the "swooshing" sound but this time he described the movement as faster. It was suggested to Mr. Reid in cross examination that Dr. Maloney only did this procedure once. Mr. Reid adamantly disagreed. He did not recall that Dr. Maloney explained what he was going to do before doing it, but does recall Dr. Maloney telling him that he thought Mrs. Reid was going to be fine.

[250] Mr. Reid said he would not allow Dr. Maloney to repeat the procedure a third time because his wife was in so much pain. He told Dr. Maloney, she could not take any more.

[251] Dr. Maloney testified about the treatment on March 13, as well. He said that the chart indicated she complained of bilateral leg pain beginning Saturday and, at the appointment, told him that her left side felt fine but her right leg was numb and she had a tingling pain down the post lateral thigh, calf and toes and an increase in muscle spasm in her right thigh and calf all weekend. According to Dr. Maloney, the chart also indicated that Mrs. Reid told him that she had experienced leg pain since her last visit on Friday, March 10.

[252] Dr. Maloney had some memory of Mrs. Reid's March 13 appointment since it was, in his words, unusual. He recalled that Mr. Reid was with her and they arrived about 9 am. He testified, Mrs. Reid reported that she had some changes over the weekend. She told him that her foot and leg strength felt normal and she had the strength to climb stairs. However, she reported that she could not feel the step under her foot. She told him, as well, that she now had the lumbo-sacral belt and it did decrease the pain although she also said that it felt too tight over the hip. Mrs. Reid also told Dr. Maloney, according to his evidence, that she had been taking Tylenol 4s all weekend but with no relief. According to his chart notes, Mrs. Reid also reported difficulty with defecation. In Dr. Maloney's view, what Mrs. Reid reported indicated a change of the clinical presentation. It now appeared to him that Mrs. Reid might have spinal neurological problems.

[253] Dr. Maloney recalled that Mrs. Reid was in quite severe pain at the appointment and had to be helped either by Mr. Reid or by both of them into one of the treatment rooms. Dr. Maloney recalled that Mrs. Reid asked if this could be fixed. He answered that he would try some gentle things to try to relax the spasm.

[254] Even though Mrs. Reid was in great pain, Dr. Maloney believed he did some static palpation of her lower back and a straight leg raise test, although it was not noted on the chart. The straight leg raise was noted, however, in the letter Dr. Maloney wrote to Dr. Gray that same day. Dr. Maloney said the chart shows that when he palpated Mrs. Reid's back he found a fixation of the left and right sacroiliac joints, similar to what he had found at her previous visit. Dr. Maloney told her he would use some upholstered blocks in the gentle treatment he was suggesting. He described Mrs. Reid as being almost in a panic state because she was in so much pain but assumed that she agreed to this procedure, because otherwise he would not have gone ahead with it.

[255] He described the use of the wedges and said, when properly used, the blocks are positioned with the blocks under the patient's pelvis and the patient positioned supine. According to Dr. Maloney, the theory is that the weight of gravity "will take the pressure off the sacroiliac joints or untwist the pelvis". Once the blocks are properly positioned, Dr. Maloney said he might apply some light pressure "to assist with gravity". What occurs is "some oscillations into the pelvis to mobilize the sacroiliac joints." He said that in the blocked position, the pelvis would be only millimetres from the table.

[256] Dr. Maloney described the Thompson drop table as another means of dealing with joint fixation. The table was brought to the court room for a demonstration. Dr. Maloney described it as having a part that lifts about 1/2 to 3/4 of an inch. The patient lies prone on the table and that generally the chiropractor would apply some pressure – just enough to make the raised piece drop. The theory is that momentum puts force on the joint. He described the sound that a Thompson drop table makes when it drops as a cross between a "slam" and a "clang" rather than the "swish" or "swoosh" described by the Reids. Dr. Maloney said a chiropractor would normally use the Thompson drop table together with the blocks only for a very muscular patient such as a rugby or hockey player. He denied using the drop apparatus when he treated Mrs. Reid on March 13 although he agreed that the table on which he treated Mrs. Reid that day might have been the Thompson drop table which can also be used as an examination table without employing the drop apparatus. He agreed that he had said at discovery, however, that his only reason for saying that the drop mechanism was not used on Mrs. Reid that day was because it was not noted on the chart.

[257] After her treatment with the blocks on March 13, Mrs. Reid said her hip felt like it was broken and that her pain level, which was at a 5 when she went into the clinic, was at 10 on the traditional ten point pain scale. Her husband helped her off the examining table but she could not walk and fell to her knees. She said Dr. Maloney told her that her body was in stress and that she needed to be calmed down. He showed her another high table "with a machine" and her husband helped her to lie on it. Dr. Maloney confirmed that what Mrs. Reid described was a device called a spinolator. Mrs. Reid's evidence was that Dr. Maloney showed her husband how to work the machine, turned it on and then left. The table had rollers on it under the surface. Her understanding was that the purpose of the machine was to massage her body. However, she said she was in too much pain and after the roller had made only a couple of passes along her body,

she told her husband to turn it off. Her husband helped her off the table but she still could not stand. Mrs. Reid recalls lying on the floor crying and in a foetal position when Dr. Maloney returned to the room. She said Dr. Maloney advised them to go to the emergency department of the hospital.

[258] Mr. Reid's evidence was similar. He said that Dr. Maloney helped Mr. Reid get Mrs. Reid off the first table and suggested a move to another table which Dr. Maloney said would relax her and 'stretch her out'. He recalls that Dr. Maloney started the roller moving on the spinolator after adjusting the roller height. He then showed Mr. Reid how to operate it and left. He did not stay to observe Mrs. Reid's reaction to the treatment. Mr. Reid said that his wife screamed in pain and he stopped the machine quickly. Mrs. Reid could not get off the table by herself and when Mr. Reid helped her off, he recalls, that she sank to the floor onto her hands and knees. He described her as panting and trying to get her breath back.

[259] Dr. Maloney agreed that he treated Mrs. Ried on the spinolator table to try to relieve the spasm in her back. He adjusted it so that the roller would cover her entire spine and said that he left her husband in charge after explaining how the machine worked. He then left the room.

[260] He agreed that Mrs. Reid's spasms might have been worse after the treatment he administered on March 13.

[261] Dr. Maloney advised Mr. and Mrs. Reid that Mrs. Reid may have some neurological involvement and that Mrs. Reid should be seen in Emergency. Mrs. Reid refused and said she wanted to see her general practitioner Dr. Gray instead. Dr. Maloney hand wrote a letter to Dr. Gray explaining his findings and his concerns and provided it to the Reids.

[262] Mrs. Reid testified she did not want to go to Emergency because she believed that she would have to wait for hours before being seen. She wanted something done now and so said she wanted to see Dr. Gray. She recalled Dr. Maloney agreeing to write something for Dr. Gray.

[263] After leaving Dr. Maloney's office, Mrs. Reid and her husband went directly by car to the Grandin Medical Clinic. She saw Dr. Gray who examined her, gave her some painkillers and also told her to go to Emergency. Mr. Reid recalled this as well and said he told Dr. Gray that he would take Mrs. Reid to Emergency later that same day. Dr. Gray's chart notes from March 13 make no mention of a suggestion that she go to Emergency.

[264] Dr. Gray's chart notes describe Mrs. Reid as arriving at the clinic with her husband, 'hobbling' and in a great deal of pain. They said, as well, that she was very sensitive in the right lower back and had decreased sensation in her right leg in the L5-S1 distribution. She was prescribed Oxycontin and Valium. Mrs. Reid recalled the Oxycontin and said that it was so strong that it virtually knocked her out. On her evidence, she has almost no memory of the time between seeing Dr. Gray in March and having surgery in April.

[265] From the Sturgeon General Hospital records, it appears that Mrs. Reid was seen in Emergency on March 14, 2000 complaining of numbness in her right leg, buttock and foot for the past five days. The impression of the emergency physician was that Mrs. Reid had an L5-S1 disc/nerve root compression. The chart notes indicate that she refused to see the on-call orthopaedic specialist stating that she wished to see Dr. Glasgow, who had done her last surgery. Mr. Reid agreed she had refused at this visit to see Dr. Narang, the on-call orthopaedic surgeon, explaining this by saying that Mrs. Reid had much confidence in Dr. Glasgow because of her previous surgery. She was referred for a CT scan by the Emergency physician.

[266] Mr. Reid recalls taking Mrs. Reid to the Emergency department of the hospital on March 13. However there is no record of this. Mr. Reid is likely mistaken. I conclude that he first took Mrs. Reid to the Emergency department the next day.

[267] Mrs. Reid was, however, seen by Dr. Narang at the outpatient orthopaedic clinic at the Sturgeon General Hospital on March 17, 2000. The chart notes were admitted by agreement and Dr. Narang did not testify. They indicate that Mrs. Reid was in a wheelchair when she was seen. She was still able to straight leg raise to 60-65 degrees bilaterally but her straight leg raise was described as "guarded". Deep tendon reflexes were present and equal bilaterally at the patella but minimally diminished at the ankle. Dr. Narang described her as moving very slowly and reluctant to do any movement involving the lower spine. She told Dr. Narang, according to the chart notes, that she had no feeling in her right buttock, the back of the right thigh, and in the right lower leg including the fourth and fifth toes. When strength was tested on her right side, she "gave way". Dr. Narang made arrangements for a CT scan. His diagnosis was "right sciatica, to rule out lumbar disc protrusion".

[268] Dr. Neil Roberts, a neurologist, examined Mrs. Reid on March 24, 2000. Again, his evidence was admitted by agreement and he did not testify. His opinion letter indicates that he diagnosed Mrs. Reid with an acute disc herniation causing compromise of the nerve roots on the right. By then, according to Dr. Roberts, Mrs. Reid was unable to straight leg at all without pain and, in fact, Dr. Roberts commented that she cried out during the procedure. An MRI scan which Mrs. Reid underwent on April 6, 2000 showed disc herniation at the L4-S5 level, causing marked compression of the thecal sac, particularly on the right side and a bulge at L5-S1. By April 7, when she was seen by Dr. Steinke, she had right foot drop, according to his chart. Again, Dr. Steinke did not give *viva voce* evidence and his written evidence was admitted by agreement.

[269] In the interim, from the time she left Dr. Maloney's office until she had the surgery, Mrs. Reid was unable to work. She described her activities as sleeping and reading only. She could do nothing else.

[270] Mrs. Reid had two back surgeries in 2000. The first, on April 10, 2000. The second, on September 28 , 2000, was on the same site.

Causation - Expert Evidence:

[271] Dr. Zalasky diagnosed acute back strain when he saw Mrs. Reid on March 7, 2000. According to his chart, his examination revealed tenderness over the para-spinal muscles and in the lumbar region. At that time, Mrs. Reid did not apparently have any radiation of pain into her legs. Dr. Zalasky did not feel that there was any evidence of prolapsed intervertebral disc. Dr. Lavoie agreed with this diagnosis. In contrast on March 13, when Dr. Gray examined Mrs. Reid after her treatments by Dr. Maloney, she complained of numbness in the right buttock and lateral sole of her right foot. She was in a great deal of pain and was hobbling. There was decreased sensation in the L5-S1 distribution of the right leg and ankle reflexes were not present. Neither Dr. Gray nor Dr. Zalasky testified. Their chart evidence was admitted by agreement.

[272] Dr. Mark Erwin, Dr. Bruce Symons, and Dr. Donald Henderson all provided expert evidence on behalf of the Defendant respecting causation of injury.

[273] Dr. Mark Erwin was qualified by agreement to give expert opinion evidence on behalf of the Defendant, in the practice of chiropractic including the diagnosis and management of low back pain and lumbar disc disease; the anatomy and biology of discs, and the pathogenesis of disc disease, degeneration, and disc herniation

[274] Dr. Erwin reviewed some of the diagnostic imaging taken of Mrs. Reid's back over time. It was his opinion that Mrs. Reid had well documented degenerative disc disease and osteoarthritis before she was first seen by Dr. Maloney. Dr. Erwin said Mrs. Reid also has a congenitally small spinal canal with a 'trefoil' shaped spinal canal at the L5-S1 junction which he said "predisposes toward some degree of spinal stenosis". In his opinion, degenerative changes affecting the disc are "widely reported to accelerate after disc injury". He said patients who have had previous back surgeries "may develop accelerated degenerative changes at the level of the past pathologies rendering these areas 'unstable' or subject to aberrant load bearing".

[275] His view was that a number of aspects of Mrs. Reid's medical history predisposed her to disc injury, whatever the cause, in March of 2000. These predisposing factors included her degenerative disc disease, her surgeries, and the fact that she smoked.

[276] His evidence in chief concentrated on describing the anatomy of a disc and the progression of changes in an aging disc which can result in degenerative disc disease. Changes in the nucleus precede changes to the annulus. The disc gradually loses its visco-elastic abilities as the nucleus becomes less able to take up water and therefore hardens, becomes fibrotic and cracks and dries out. It also loses height and is unable to stand load bearing. It can then bulge.

[277] Dr. Erwin's evidence differentiated between the normal aging process and degenerative disc disease. He named genetics and smoking as the main reasons that some people develop degenerative disc disease and others do not. Smoking impairs circulation and that accelerates the degenerative process.

[278] In Dr. Erwin's opinion trauma can play a role in disc damage but this role was not clearly understood. He cited one recently published study which concluded that every day activity over time and not trauma, was the single most common cause of degenerative disc disease. He agreed, however, in cross examination that this study had simply looked at charts of patients to see if a precipitating event had been recorded and it was on that basis that the authors had concluded that 63% of patients with disc protrusions did not identify a precipitating event. He said he was not familiar with another study cited by counsel for Mrs. Reid which, according to counsel showed almost 100% of patients with disc protrusions did have a precipitating event. Dr. Erwin could not say whether Dr. Lavoie's opinion, that if you look carefully at the history of all patients with disc protrusions you will almost always find a precipitating event, was correct.

[279] He agreed in cross examination that a determination of causation requires consideration of the temporal aspect of events as well as the sequence of symptoms, the patient's history, any imaging that exists and the biology at work.

[280] In Dr. Erwin's opinion because Mrs. Reid suffered an acute onset of back pain after lifting her grandson, with sciatica developing over the next few weeks, "it is highly likely that she suffered a herniated disc while bending and picking up her grandson two weeks earlier".

[281] Dr. Erwin was asked to specify what factors he considered in reaching this conclusion. In respect to the timing and sequence, he said that he found it significant that Mrs. Reid suffered back pain after lifting her grandson, which, he understood, was not improving and was different from normal. His understanding was that this pain was severe enough to require narcotics and muscle relaxants and did not change over the few weeks between the grandchild incident and Mrs. Reid's first appointment with Dr. Maloney. He also considered it significant that Mrs. Reid had a history of degenerative disc disease and two previous lower back surgeries – one in 1984 and one in 1988. The x-ray taken on March 7, 2000 was also significant, in his view. He said it showed boney growths on the posterior part of the spine with articular cartilage overlying the joint around fluid inside. He said there was also a loss of disc height and that told him that the discs were under "significantly increased loading".

[282] He also said that Dr. Zalasky's statement in his chart on March 7, 2000 that Mrs. Reid's symptoms showed no evidence of prolapsed intervertebral disc was inaccurate. In Dr. Erwin's view, the fact that Mrs. Reid was unable to bend backwards could be evidence of an inflammation of the facet joints or a disc that protruded posteriorly. His reading of the symptoms reported by Dr. Zalasky on March 7 in comparison with those reported by Dr. Maloney on March 9 caused Dr. Erwin to conclude that Mrs. Reid's symptoms had progressed over the few days between those two visits: she had leg pain on March 9, and Dr. Zalasky's chart did not indicate this on March 7.

[283] Dr. Erwin also said that some of the other chart notes seemed to indicate that Mrs. Reid later had fewer symptoms and no pain (at least in her left leg) and he wondered if this did not mean she was getting better even after her treatment by Dr. Maloney. He said that what it might

also mean is that Mrs. Reid's symptoms were variable. In cross examination he agreed that when he came to the conclusion that Mrs. Reid might have been improving after her treatment by Dr. Maloney, he did not take into account the rather significant analgesics that Mrs. Reid was by then taking.

[284] Dr. Erwin's opinion was that Mrs. Reid was suffering from a back injury when she saw Dr. Maloney but that it was not clear what type. He opined that the symptoms that Mrs. Reid suffered from following her second and third visits with Dr. Maloney did not necessarily mean a significant injury had occurred but may have been simply a continuation of the same progression that had begun earlier. He did say, however, that Mrs. Reid's symptoms on Monday, March 13 showed clear evidence of nerve irritation and that based upon the symptoms she exhibited on March 14, he would be highly suspicious of a disc injury or problem. It was his opinion that the spinal manipulation that Mrs. Reid underwent at the hands of Dr. Maloney created only a negligible risk – no more than any other ordinary daily activity that Mrs. Reid had engaged in.

[285] In support of his opinion Dr. Erwin pointed, in particular, to an article by Tampier, C. , Drake, J., Calaghan, J. and McGill, S.,: *Progressive Disc Herniation* published in ***Spine***, vol 32, No. 25, 2007, pp. 2869-2874. This article documents an experiment which subjected 16 cervical spine segments of young pigs to compressive loading for a long time period and documented the resulting changes to the discs. The experiment produced eight disc herniations and four partial herniations and the authors reached conclusions respecting the process by which these herniations occurred. They did not find ruptures of annulus fibres but instead small clefts in the annulus which allowed nuclear material to progress through them, accumulating and causing delamination within each lamella rather than between the layers of the annulus. The authors of the study cautioned however, that the progression of material through the annulus may be different depending on the age of the subjects and noted that their study used a limited number of specimens and that these were from healthy young pigs. The same mechanism of degeneration may not exist for discs that are already degenerated, according to the authors.

[286] It was Dr. Erwin's view that in someone like Mrs. Reid, the sudden squirting out of nuclear material in response to pressure would be less likely than in a younger person with a healthier more gelatinous nucleus. It was his view, having looked at her June, 2000 CT scan, that Mrs. Reid's lumbar discs were likely quite fibrotic and would not have suddenly squirted. He said, as well, that a traumatic annulus tear would tend to be very painful because the annulus is enervated.

[287] Dr. Bruce Symons, also gave expert evidence for the Defendants respecting the physics of forces on spines. He postulated that the forces used by Dr. Maloney on Mrs. Reid would be about 300 Newtons based upon her weight of 130 lb. He said further that studies in the thoracic spine indicate that only 2% of the peak contact force is actually experienced by the underlying joint. Dr. Symons indicated that the forces applied to a patient in the particular manipulation performed by Dr. Maloney upon Mrs. Reid, that is a side posture lumbar manipulation had not

been scientifically measured. However, he said his opinion was that the forces involved in a side posture manipulation would be much lower because the sacroiliac joint is a big and strong joint that would take a lot of force to move.

[288] In oral evidence, he said that the amount of force applied to the bone in a chiropractic manipulation was actually a red herring because the force of the thrust goes to the bone, not on the disc itself. It is the force of the thrust that makes the bones move, which then drag the disc with it, so the amount of damage that may be caused to the disc is related to how far the disc itself moves, not to the force of the thrust. His opinion was that the force on the bone does not transfer through.

[289] He said a disc is made particularly vulnerable to injury because of three combined motions of the spine: axial compression of the spine (caused by the fact that the spine is an integrated unit and bears weight from the combined effects of the mass it carries head to toe when the person is, for example standing); flexion of the disc; and rotation. Axial compression is increased when someone is carrying something.

[290] Dr. Symons' opinion was that axial compression is minimized in a side posture manipulation because the patient is lying down. He said it is further minimized by the fact that the chiropractor extends the patient's back somewhat before performing the manipulation. The patient's back is also straight during the procedure so, in his opinion, flexion of the disc is absent. His evidence was that it was the combined effects of all three of these forces that could rupture a disc and since two of these forces were greatly reduced during a spinal manipulation, it was very unlikely that the manipulation could cause a disc rupture.

[291] His evidence was, as well, that because the chiropractic manipulation occurs at a high velocity and because a disc is a visco-elastic body (like a foam memory bed) essentially the disc does not have time to change shape during the brief time that the push exerts force.

[292] He did agree that if a disc was very degenerated ,"hanging on by a few threads", then a chiropractic manipulation could damage it. However, he said the same thing could happen if a person with a badly damaged disc simply rotated their spine while seated to speak to someone behind them. He agreed as well that a person with a spine that had been previously operated on would be more vulnerable to damage.

[293] Dr. Henderson, the third expert called by the Defence on the issue of causation, was of the opinion was that Dr. Maloney's treatment of Mrs. Reid did not cause the discal extrusions described in the surgical record. In his report dated February 27, 2006 he said:

> It is difficult for anyone to pronounce that the chiropractic treatment caused any injury...The natural history of disc injuries often arise from mechanical strains such as lifting and this; combined with spontaneous, progressive protrusion and degenerative changes of disc material, may result in disc herniation...At least

> supported by temporal association, it is possible that the chiropractic manipulation on or about March 10, 2000 may have aggravated this condition. It is equally possible that Mrs. Reid's activities of daily living (bending, coughing, sneezing, etc.) and the fall on or about March 11 may have similarly aggravated her lumbar disc problem.

[294] Dr. Henderson agreed in cross examination that Mrs. Reid was suffering much more than simply muscle spasm on March 13 even though muscle spasm was all he mentioned in his report. He agreed as well that a chiropractic manipulation could be the trigger for a non-symptomatic disc problem becoming symptomatic. He agreed further in cross examination that the treatment done by Dr. Maloney on March 13 could exacerbate an already existing bulged disc. He would not agree, however, that the March 13 treatment could cause a bulged disc. He was also asked to assume in cross examination that Mrs. Reid had the symptoms she reported in examination in chief on Friday night, March 10. He agreed that if he made that assumption, the problems she reported experiencing on Saturday while shopping at Safeway were likely a continuation of the preceding problem.

[295] Dr. Philip Conway and Dr. Mitch Lavoie both provided evidence respecting causation on behalf of the Plaintiff.

[296] Dr. Conway defined manipulation in chiropractic terms as the application of an external force in a thrusting fashion to a particular site on the human body, either manually or by using a machine (the identified target site being the area of concern, most often the spinal column or a joint surface). The purpose of the manipulation is to restore normal function within the targeted site. He said that the theory is that by moving the joint into a particular range of motion, you can re-establish its correct normal movement patterns and re-establish normal function.

[297] He added that physically some chiropractors suggest that once you hear a 'popping' sound, sometimes called cavitation, the treatment is successful. However, he said sometimes there is no sound and success of treatment is measured by the fact that a patient says they feel better. He said that what a chiropractor looks for is actual movement in the target site and the surrounding segments or joint segments and restoration of normal function as determined by the examination process.

[298] He was also asked to describe conservative treatment in chiropractic terms. He defined it as treatment in which external measures such as ice, exercise, rest or heat are applied to the area of concern but no manipulation is applied. He added however that sometimes mobilization or pumping can constitute a conservative treatment so long as it is a very low key non-invasive type of treatment. He said conservative treatment did not include large thrusting actions into a joint surface or any action designed to produce a cavitation sound. He said, as well, that the conservative treatment protocol was passive, gentle on the area of concern and was generally a treatment used while trying to get more information before starting a more aggressive treatment.

[299] Dr. Conway was also asked to explain the adjustments which Dr. Maloney administered at Mrs. Reid's second appointment. He said that it appeared from the chart there had been four adjustments: the L5 lumbar vertebra, the L4 lateral process on the left and right sides, the left ilium and the right sacrum. Two of the four were similar to the adjustments done the previous day.

[300] Asked to describe in particular the technique and the purpose of two of the adjustments made by Dr. Maloney on March 10, Dr. Conway first described the right L4 lateral process push. He said that in this procedure, the chiropractor makes direct contact with the spinalis process of the L4 vertebra with the intention of actually moving the L4 joint to try to decrease pain, muscle inflamation or spasm and restore normal joint motion. The second adjustment he described was the left L5 lateral process push. In this manipulation, he said the intention was to make actual contact with the left lateral process of the L5 vertebra to move it laterally in a rotational type of movement.

[301] He said he would not describe the four manipulations that Dr. Maloney did on Mrs. Reid on March 10, 2000 as conservative treatment.

[302] Dr. Conway was asked to explain *cauda equina* syndrome because it was mentioned as a differential diagnosis in Dr. Maloney's letter to Dr. Gray as well as in Dr. Henderson's report. He described it as a central disc problem at the L1 or L2 level where all of the nerves exit the spinal column. A disc problem at this level could result in the patient being unable to walk, to defecate, or to urinate and is very serious. No manipulation should be done on any patient where *cauda equina* syndrome was a differential diagnosis and the only appropriate course of action was to refer the patient immediately to the emergency department although emergency ancillary care is appropriate – such as lying them on their side and putting ice on the area.

[303] Dr. Conway commented on Dr. Maloney's treatment of Mrs. Reid on March 13, using the blocks to support the pelvis and the application of pressure to her hips. He said in theory this treatment is very passive. However, the technique required putting the blocks under the patient's pelvis when they were lying prone (not supine as was described by Mrs. Reid). He said, properly administered, once the blocks were placed, the patient was simply left lying in this position for about one half hour, on the theory that the blocks, if placed properly, would encourage the spine to move in the direction you wanted it to move.

[304] Dr. Mitch Lavoie, who also gave expert evidence for the Plaintiff, described the physiology of an intervertebral disc in his direct evidence, as well. He likened the annulus or covering of the disc to a tire located around the soft jelly like centre, the nucleus. He said that the annulus could tear and that such tears resulted in disc herniation. He described three major categories of tears: a disc protrusion or bulge where there may be a tear of a few fibres in the annulus but not a complete tear. The result of such a tear is that the disc bulges into the weak area. A more serious category is a disc protrusion where a piece of disc extrudes from the annulus and gets trapped between the annulus and the ligament. This is called a sequestered disc.

The most serious is a disc herniation where a piece of disc breaks free in the canal after going right through the tear of the annulus. He said you can also have combinations where, for example, a portion protrudes, a portion gets trapped and another portion gets free and goes into the spinal canal.

[305] Dr. Lavoie agreed with Dr. Zalasky's March 7 diagnosis; in contrast, he said that Dr. Maloney's examination notes could suggest nerve root irritation on March 9.

[306] The manipulation procedure which Dr. Maloney carried out on Mrs. Reid on March 9 was described to Dr. Lavoie. He was familiar with it and said that in his opinion this manipulation would create a rotational force across the lumbar spine and would increase strain across the lumbar discs. His opinion was, as well, that the symptoms Mrs. Reid exhibited on March 10 were indicative of increased nerve root irritation which could have been discal in origin. In commenting on the muscle spasm that Mrs. Reid reported she had suffered the night of March 9-10, Dr. Lavoie called it an involuntary reaction to an injury and said it was a classic symptom in someone with lumbar disc herniation. He agreed, however, that it was certainly prevalent in reaction to other problems as well, such as acute back strain.

[307] The four manipulations that Dr. Maloney performed on Mrs. Reid on March 10 were described to Dr. Lavoie. He had two comments. Firstly, he questioned whether Dr. Maloney could actually tell the part of the spine on which he was putting pressure. In his opinion, it was difficult, even with a slim person, to accurately determine by palpation what part of the lumbar spine was presenting. He said it was sometimes even difficult to tell this by palpation in a patient sedated before surgery where their normal muscle tone was absent. He said surgeons rely upon x-rays to determine conclusively the location of particular parts of a spine. In his opinion, pressure such as Dr. Maloney described as applying to Mrs. Reid could cause movement in the spine of a slim woman, such as Mrs. Reid and the described manipulation would apply stress to the disc. Asked to comment on the symptoms Mrs. Reid described immediately after the manipulation, Dr. Lavoie said he would be concerned that "something untoward" had happened as a consequence of the manipulation. He said, as well, that the incident Mrs. Reid described at the shopping centre was consistent with a progression of the symptoms she had exhibited after the manipulations on March 10.

[308] He further said that the March 13 problems described by Mrs. Reid, coupled with her history, would cause him on the basis of his training in orthopaedics, to conclude that her spine should not be manipulated. He said the concern was the possibility that a piece of disc is herniated and has progressed and is causing compression causing further problems. He said he would even suspect *cauda equina* syndrome.

[309] Dr. Lavoie also commented on the SOT blocking manouevre as described by Dr. Maloney. It was Dr. Lavoie's opinion that this procedure would also have put pressure on her lumbar spine and he would be concerned that it would cause pressure on a lesion.

[310] Dr. Lavoie's opinion letter set out his findings on review of both the MRI scan done of Mrs. Reid's spine on April 6, 2000 (before her first surgery) and the radiographs and MRI done of her spine on June 17, 2000 and August 30, 2000 respectively (after her first surgery but before the second surgery). In his opinion, the April 6, 2000 MRI showed a disc herniation measuring 6 mm by 10 mm at the L4-5 level causing marked compression of the thecal sac, particularly on the right side. There was also a bulge at the L5-S1 level. The later radiographs showed a lesion at L4-5 suggestive of a large extruded fragment of disc and causing significant central stenosis. The follow up MRI confirmed a large lesion at the L4-5 level consistent with an extruded or sequestered disc, mainly central and causing severe stenosis.

[311] Dr. Lavoie disagreed with Dr. Erwin in respect to what Dr. Zalasky's March 7 findings showed. His opinion was that Mrs. Reid's presentation at the Grandin Medical Clinic when she was examined by Dr. Zalasky on March 7, 2000 before the chiropractic treatment "does suggest an acute back strain". In contrast, he said, her presentation on March 13, 2000 "certainly suggests an acute lumbar disc herniation". In direct examination, he said that he agreed with Dr. Zalasky's opinion that on March 7, 2000, he saw no evidence of prolapse of intervertebral disc.

[312] Dr. Lavoie said there appeared to be a causal link between the chiropractic treatment and the lumbar herniation and said "[t]he best evidence supporting a causal link between the chiropractic treatment and the disc herniation at L4-5, is Dr. Maloney's own documentation and the fact that after his chiropractic treatment, he was concerned enough to request that Mrs. Reid go directly to the Emergency Department...This would seem to indicate that Dr. Maloney at the time had a sense that something was amiss." The only data not supportive of this causal link, in his view, was that something may have happened while Mrs. Reid was shopping on the weekend after her March 10 treatment by Dr. Maloney and before her last treatment by Dr. Maloney on March 13. When specifically asked about Mrs. Reid's shopping trip and whether that could have caused the symptoms she was complaining of on March 13, Dr. Lavoie said it was possible but not probable that she did something while shopping that caused her disc to herniate.

[313] Dr. Lavoie agreed that determining causation was a process of looking at what is biologically plausible as well as how strong the association was and agreed as well that there were many potential causes for disc herniations. He also agreed that the temporal aspect was only one aspect of causation. Further, he agreed that Mrs. Reid's pre-treatment x-rays showed that she had degenerative changes in her lumbar spine. He agreed further that it was possible that such degenerative changes could irritate the nerve but said this was uncommon and it was much more common to have nerve irritation caused by a disc herniation or by an osteophyte from a facet joint. He agreed as well that the most likely cause or factors for lumbar disc herniation were flexion and rotation of the spine (such as picking up something or bending over and twisting with it) and the second most common was an increase in pressure in the abdomen such as what occurs with coughing or sneezing. He agreed, as well, that a tear in the annulus could occur very gradually as a consequence of wear and tear. He also agreed that there were many possible causative factors involved in a tear in the annulus that occurred gradually and smoking was one factor because it had an adverse effect on the health of the annulus. He also agreed that

it was possible that Mrs. Reid's disc herniations were caused simply by wear and tear but said that this discounts the temporal aspect of her injury. He refused to agree, however, that people who had had one disc surgery were necessarily more likely to require a second.

[314] In redirect he agreed that causation could also be defined as a factor, accident or exposure that results in a medically identifiable condition. In this case, the medically identifiable condition was the L4-5 disc herniation and the identifiable cause was the chiropractic manipulation.

[315] If one examined an MRI image of the backs of a thousand persons over 50, taken at random but without any back pain, Dr. Lavoie said he would not be surprised to find that none had a normal back. However, symptoms are very variable. Many have no symptoms. Others will have symptoms that persist for a month or two then settle and some few will have such serious and persistent symptoms that surgery is required.

[316] It was his view that the temporal relationship between an event and an injury was very important to determine causation. It was his opinion that the sequence of events was crucial.

[317] He was asked what the symptoms reported by Mrs. Reid after lifting her grandson suggested she might be suffering from at that time. Dr. Lavoie considered it an important part of her presentation that she had lower back pain and sciatica with radiation into her left buttock. He said this was likely caused by a lumbar disc herniation causing nerve root irritation. When asked specifically if her symptoms suggested an annular tear, he said that was possible as well. He said, as well, that the most likely progression in 90-95% of cases was that it would get better on its own over three or four months. He said neither the literature nor his own experience caused him to conclude that it would inevitably lead to a disc extrusion in the vast majority of people. It was also his opinion that there was nothing in the massage therapist's notes respecting her treatment of Mrs. Reid in the period between the incident with her grandson and the treatment by Dr. Maloney which indicated any discal involvement.

[318] Dr. Lavoie said that Mrs. Reid's previous two back surgeries had left her with a weakness in the area that predisposed her to further injury at the same site because disc surgery is done on a back that is already abnormal. Further, the surgery itself leaves a rent in the annulus because it does not heal properly which leaves the disc operated on predisposed to further injury. As well, he said, the effect of the surgery is to pre-dispose adjacent areas of the spine to problems because the bio-mechanics of the spine had been altered by the surgery. This is called adjacent segment disease.

[319] Dr. Lavoie's opinion was that Mrs. Reid's clinical presentation at Grandin Medical Clinic was quite different on March 13 from what it was on March 7. In his opinion, her presentation on March 7 suggested acute back strain while that on March 13 suggested an acute lumbar disc herniation. He said what he had reviewed showed a causal link between the chiropractic treatment and the lumbar disc herniation.

[320] When asked in re-direct what he thought happened to Mrs. Reid in her treatment by Dr. Maloney, Dr. Lavoie said the pain was caused likely because she extended an annular tear that had occurred when she lifted her grandson. She had a left sided bulge into her previous scar. He thought that when she had the chiropractic manipulation, the disc was loaded and because the left side was scarred from previous surgeries, the disc squirted out and went into a ligament. He says this explains the MRI findings from April 6 which show a large disc extrusion at L4-5 and is consistent with the sudden onset of increased pain in the opposite leg.

[321] He described causation as an identifiable factor, an accident or exposure that results in a medically identifiable condition. In this case, he said the medically identifiable condition was lumbar disc herniation at the L4-5 level and the identifiable factor was the chiropractic manipulation.

Causation - Findings of Fact:

[322] Based upon the evidence of Dr. Erwin, Mrs. Reid's many medical records, and the testimony of various other experts, as well as the evidence of Mrs. Reid herself, it is clear that Mrs Reid had well documented degenerative disc disease and osteoarthritis when she was first seen by Dr. Maloney.

[323] I accept the evidence of both Dr. Erwin and Dr. Lavoie, as well, that the fact that Mrs. Reid smokes made her more susceptible to degenerative disc disease. I do not find it possible to conclude on the evidence that she also has a genetic pre-disposition to developing this disease. Certainly, however, her history is of someone who has had many back problems associated with degenerative disc disease, whatever the reason.

[324] I further accept the opinion of both Dr. Erwin and Dr. Lavoie that Mrs. Reid's previous two back surgeries had left her with a weakness in the L4-L5 and L5-S1 area and predisposed her to further injury at the same sites. However, I do not accept that her previous surgery made further surgery more likely. In this regard, I accept the evidence of Dr. Lavoie over the other experts, since he is the orthopaedic surgeon and would have much more experience with the incidence of further surgery in patients who have had earlier surgery than would the other experts.

[325] There was a big change in Mrs. Reid's condition between March 7 and March 13. Mrs. Reid reports symptoms that are much more serious on March 13 and none of the experts disagrees that her increased symptoms are evidence of a change in her condition. I accept the evidence of Dr. Lavoie and of Dr. Zalapski, that on March 7, 2000 Mrs. Reid had no symptoms suggestive that she was suffering from disc prolapse. On March 13, she showed definite symptoms of disc prolapse. I prefer their evidence to that of Dr. Erwin, for the reasons I will later discuss.

[326] All of the experts are agreed that Mrs. Reid did not suffer from *cauda equina* syndrome, although this was a concern based upon her symptoms on March 13 and later, and further investigation was justified.

[327] The symptoms reported by Mrs. Reid on March 10, were not transient. Dr. Maloney's evidence respecting Mrs. Reid's symptoms before he started her second treatment suggest that he objectively found spasm, still present, when he examined Mrs. Reid on March 10. As well, it seems apparent that she told him that she had suffered back spasm much of the previous night.

[328] Although a number of the experts seem to have been told that Mrs. Reid fell or otherwise injured herself when she was at the supermarket on March 11, I find that she did not fall. I accept the evidence of Mrs. Reid that her leg gave way at the supermarket and she had to hold on to the grocery cart to avoid falling. She did not twist, carry a weight or do anything else that the experts have suggested could have caused injury to her disc, either. Nothing that occurred at the supermarket on March 11 caused or contributed to Mrs. Reid's back problems and the supermarket incident was, instead, connected to events that occurred earlier. In particular, in this regard, I accept the evidence of Dr. Lavoie and Dr. Henderson that the events Mrs. Reid described as having occurred at the supermarket were consistent with a progression of the symptoms she had exhibited after the manipulations on March 10 and not evidence of an injury that occurred at the supermarket.

[329] Mrs. Reid refused to see Dr. Narang at the Sturgeon Hospital asking instead to see Dr. Glasgow. However, there is no evidence that this changed or worsened her condition in any way. While one could also conclude that Mrs. Reid's refusal to see Dr. Narang must mean that her symptoms were not as serious as she and her husband described them, I do not consider this assumption to be reasonable, given the various descriptions from professionals of the severe pain that Mrs. Reid exhibited from March 13 on. The fact that Mrs. Reid refused to see Dr. Narang when she was taken to Emergency on March 14 is unimportant to resolution of the issues in this case.

[330] There is no evidence that anything else happened to Mrs. Reid following her last appointment on March 13, 2000 which could have caused or contributed to her prolapsed disc.

[331] The results of the MRI completed on April 6, 2000 showed disc herniation at the L4-S5 level, causing marked compression of the thecal sac, particularly on the right side and a bulge at L5-S1. By April 7, when she was seen by Dr. Steinke, Mrs. Reid had right foot drop, according to his chart; this symptom makes it very clear that she was suffering from a herniated disc. She was also, by then, undoubtedly taking the Oxycontin prescribed for her by Dr. Gray.

[332] The drugs prescribed for her by Dr. Gray had a strong effect on Mrs. Reid, as is clear from a description Mr. Reid gave of his wife's mental state at trial:

> [T] he Monday night by midnight you could have said to Marlene we are going to Switzerland. She would have said okay fine. We are going shopping – okay fine – or we are going downtown -- okay fine. She was so far off the picture she was mentally just stoned.

[333] The first three and one half pages of Dr. Erwin's rebuttal expert report were critical of Dr. Lavoie's report, pointing out what Dr. Erwin said were errors in facts that Dr. Lavoie sets out. I note, however, that some of the 'facts' that Dr. Erwin says are wrong were, in fact, correct and it is Dr. Erwin who is mis-informed. For example, he says that Dr. Lavoie erred in stating Mrs. Reid had muscle spasm in the right thigh and calf all weekend. Dr. Erwin says "in fact the symptoms in the right leg did not begin until Saturday March 12[sic] while grocery shopping". The evidence was that Mrs. Reid's right hip hurt immediately after the treatment on March 10 and both legs felt weak as she left Dr. Maloney's office. She said as well that her right leg began to spasm that night and those spasms continued during the night and the next morning when she went shopping with her daughter on Saturday March 11. I accept her evidence. It is Dr. Erwin who is mistaken.

[334] The manipulations done by Dr. Maloney on Mrs. Reid's spine on March 9 and again on March 10 created rotational forces on the L4 and L5 vertebra and therefore on the L4-5 disc. These forces were of unknown but perhaps significant magnitude. As Dr. Conway said, the goal of a manipulation is to move the targeted area of the spine. From Dr. Conway's evidence, it is quite clear that the L4 and L5 lumbar spinal processes were specifically targeted by Dr. Maloney in his manipulations. It was the opinion of both Dr. Erwin and Dr. Lavoie that rotational forces could be generated with a manipulation. I do not accept Dr. Symons' opinion that the forces involved must be minor. The research upon which he bases his opinion does not support his theory and his opinion is based upon supposition and not fact.

Causation - Legal Principles and Application to the Facts:

[335] For the Plaintiff to succeed she must establish on a balance of probabilities that the Defendant's acts of negligence were both the factual and legal cause of Mrs. Reid's injuries. Factual causation addresses cause and effect between the breaches of care and Mrs. Reid's injuries. Legal cause, sometimes referred to as proximate cause, addresses the foreseeability of the injuries.

[336] The general principles for factual causation come from the Supreme Court decisions in ***Snell v. Farrell*** [1990] 2 S.C.R. 311; ***Athey v. Leonati***, [1996] 3 S.C.R. 458; and ***Resurfice v. Hanke***, [2007] 1 S.C.R. 333,

[337] In ***Snell v. Farrell***, at para. 26, Sopinka, J. speaking for the court described causation as:

> ..an expression of the relationship that must be found to exist between the tortious act of the wrongdoer and the injury to the victim in order to justify compensation of the latter out of the pocket of the former.

[338] ***Snell*** involved alleged medical malpractice. Snell became blind in one eye following a cataract operation. There was bleeding during the operation, a sign of difficulty. The doctor noticed a small discoloration in the eye, palpated the eye and found that it was not hard and, since there were no other signs of bleeding, chose to continue the surgery. After the operation it became clear that Snell lost sight in that eye because of optic nerve atrophy.

[339] The atrophy could have been caused by the operation or by a natural cause such as a stroke in the eye itself, which is most likely in a patient with cardiovascular disease, high blood pressure or diabetes. Snell did suffer from high blood pressure and diabetes as well as severe glaucoma, another possible source of atrophy. There was no scientific certainty concerning what caused the injury or when it occurred.

[340] The trial judge found that the doctor acted negligently in continuing the operation after noticing that there was bleeding in the patient's eye. The trial judge held that the burden had shifted to the defendant to disprove causation and this burden had not been discharged. The Court of Appeal dismissed the appeal and the defendant further appealed to the Supreme Court of Canada.

[341] The Supreme Court held that a plaintiff in a medical malpractice suit must prove causation in accordance with traditional principles, which the Court then went on to define. It affirmed that the onus is on the party who asserts a proposition, usually the plaintiff; but where the subject matter of the allegation lies particularly within the knowledge of one party, that party may be required to prove it.

[342] The Court cautioned against too rigid an application of the causation principles and stated:

- causation is essentially a practical question of fact which can best be answered by ordinary common sense rather than abstract metaphysical theory: para 29;
- causation need not be determined by scientific precision: para 29;
- in many malpractice cases, the facts lie particularly within the knowledge of the Defendants, and in these circumstances, very little affirmative evidence on the part of the plaintiff will justify the drawing of the inference of causation in the absence of proof to the contrary: para 30;
- the legal or ultimate burden remains with the plaintiff, but in the absence of evidence to the contrary adduced by the defendant, an inference of causation may be drawn although positive or scientific proof of causation has not been adduced. If there is some evidence to the contrary then the trial judge is to take a "robust and pragmatic approach to the facts.": para 31; and

- it is not essential that the medical experts provide a firm opinion supporting the plaintiff's theory of causation. Medical experts ordinarily determine causation in terms of scientific or medical certainties, conclusions that are one hundred percent sure, rather than the lesser standard of more probable than not as demanded by law: para 33-36.

[343] In ***Athey***, the plaintiff had a history of back problems and suffered back injuries in two separate car accidents. Following his doctor's advice, he resumed his regular exercise routine after the second accident and suffered a herniated disc while warming up. The trial judge found that the damage was largely due to Athey's pre-existing back condition and assessed liability at 25% of the full loss. The Court of Appeal dismissed the appeal and the plaintiff further appealed to the Supreme Court of Canada, which allowed the appeal.

[344] The "but for" approach was clarified at paras. 13-17, 19, of the Supreme Court's decision. The Court recognized that the "but for" test may be the starting point, but said it does not occupy the entire field of factual causation. Justice Major, writing for the majority, held that:

> • Causation is established where the plaintiff proves to the civil standard on a balance of probabilities that the defendant caused or contributed to the injury ...
> • The general, but not conclusive, test for causation is the "but for" test, which requires the plaintiff to show that the injury would not have occurred but for the negligence of the defendant ....
> • The "but for" test is unworkable in some circumstances, so the courts have recognized that causation is established where the defendant's negligence "materially contributed" to the occurrence of the injury. ... A contributing factor is material if it falls outside the *de minimis* range ...
> • ... Although the burden of proof remains with the plaintiff, in some circumstances an inference of causation may be drawn from the evidence without positive scientific proof.
> • It is not now necessary, nor has it ever been, for the plaintiff to establish that the defendant's negligence was the sole cause of the injury ...
> • ...The law does not excuse a defendant from liability merely because other causal factors for which he is not responsible also helped produce the harm ... It is sufficient if the defendant's negligence was a cause of the harm ...

[345] In ***Resurfice Corp. v. Hanke***, at paras. 21-22, the Supreme Court confirmed the "but for" test as still the "basic test" which "has never been displaced", going on to explain beginning at para 23:

> The "but for" test recognizes that compensation for negligent conduct should only be made "where a substantial connection between the injury and the defendant's conduct" is present. It ensures that a defendant will not be held liable for the

> plaintiff's injuries where they "may very well be due to factors unconnected to the defendant and not the fault of anyone": ***Snell v. Farrell***, at p. 327, per Sopinka J.

[346] Beginning at para. 24, however, the Court outlined that in some special circumstances, the law has recognized exceptions to the “but for” test and applied, instead, the “material contribution” test. The Court indicated that cases in which the “material contribution” test may properly be applied involve two requirements:

> 25 First, it must be impossible for the plaintiff to prove that the defendant's negligence caused the plaintiff's injury using the "but for" test. The impossibility must be due to factors that are outside of the plaintiff's control; for example, current limits of scientific knowledge. Second, it must be clear that the defendant breached a duty of care owed to the plaintiff, thereby exposing the plaintiff to an unreasonable risk of injury, and the plaintiff must have suffered that form of injury. In other words, the plaintiff's injury must fall within the ambit of the risk created by the defendant's breach. In those exceptional cases where these two requirements are satisfied, liability may be imposed, even though the "but for" test is not satisfied, because it would offend basic notions of fairness and justice to deny liability by applying a "but for" approach.

[347] As was reiterated in ***Snell***, while medical experts ordinarily determine causation in terms of scientific or medical certitude, the lesser standard demanded by law is, of course, a balance of probabilities.

[348] The parties in this case had competing theories. The Plaintiff’s theory was that the SMT administered by Dr. Maloney on March 10, 2000 caused Mrs. Reid’s prolapsed disc and that this was exacerbated by the further treatment she received on March 13. The Defendant’s theory is that Mrs. Reid’s disc was herniated when she lifted her grandson on or about February 15, 2000 and that if the SMT therapy administered by Dr. Maloney contributed to her evolving condition, the contribution was *de minimus.*

[349] In this case, none of the experts is able to say definitively that the March 10 manipulation caused Mrs. Reid’s disc to prolapse. Practically, however, when courts are faced with conflicting expert medical evidence and none of the experts is in a position to provide the court with anything more than a “more likely than not” opinion, the judge must still arrive at a conclusion and may do so by taking the information that the experts provide, applying that information to the facts and circumstances it finds and drawing whatever reasonable inferences the judge considers appropriate to the matrix of information it receives: ***Aristorenas v. Comcare Health Services*** (2006), 83 O.R. (3d) 282 at para. 56 (C.A.)

[350] It is clear on the evidence, and I conclude that Mrs. Reid was vulnerable to disc injury because of her history of degenerative disc disease, her two previous surgeries, and the fact she smokes.

[351] I accept, as well, that it is possible for a disc protrusion or prolapse to occur somewhat spontaneously, caused by wear and tear and without any obvious triggering mechanism. Indeed, I accept the expert evidence that something as minor as a cough can sometimes trigger a disc problem. However, I do not conclude this is what happened here. I accept the evidence of Dr. Lavoie that in most cases there is a trigger mechanism. To assume, that Mrs. Reid's back injury was simply spontaneous is to ignore the temporal aspect of her pain. I reject Dr. Erwin's evidence on this issue. As an orthopaedic surgeon, Dr. Lavoie has had vast experience and has doubtless taken or reviewed a patient history for every patient on whom he has operated for disc injury. As a result of his experience, Dr. Lavoie is in a much better position to provide opinion evidence about the causal link between a precipitating event and disc injury than is Dr. Erwin who bases his opinion on one study, which study was apparently based upon chart review rather than direct observation and discussion with patients. To cite only the most obvious reason that this study may be flawed, any inaccurate or incomplete charting would affect the results.

[352] Based upon the evidence of when Mrs. Reid's pain began and when it worsened, it is clear that her disc injury resulted from an event or a series of events that occurred in February and March of 2000. Her back did not hurt until she lifted her grandson on or about February 15. Before that she had no symptoms. After that, her back hurt. The pain was not enough to keep her from working or carrying on her normal activities. However, it is clear that her back hurt enough to seek treatment, first from her massage therapist and then from Dr. Mahoney. After her treatment on March 10, her pain grew worse and after the further treatment on March 13, it was worse again. The later MRI confirmed the disc problems, suspected by all of the treating practitioners, including Dr. Maloney on March 13.

[353] There are only three possible explanations for this progression, in my view:

a. The injury occurred when she lifted her grandson and later progressed. The chiropractic manipulation had little or no effect, as was the opinion of Dr. Henderson and Dr. Erwin;

b. An initial discal bulge occurred when she lifted her grandson but would likely have resolved were it not for the chiropractic manipulation which caused the prolapsed disc, as was the opinion of Dr. Lavoie;

c. When Mrs. Reid lifted her grandchild, she suffered a muscular strain. The chiropractic manipulations caused all of her discal injuries.

[354] I conclude on the evidence that Mrs. Reid did not suffer a disc herniation at the L4-S5 disc when she lifted her grandson in February 2000. She suffered either a low back strain that was muscular in origin or a disc bulge at either L4-5 or L5-S1. Dr. Zalasky diagnosed low back strain on March 7, 2000 and Dr. Lavoie agreed with this diagnosis. Dr. Zalasky found tenderness over the para-spinal muscles and in the lumbar region when he examined Mrs. Reid but did not note any radiation of pain into her legs and found no evidence of a prolapsed intervertebral disc. Dr. Lavoie's opinion was that the symptoms noted by the massage therapist who treated Mrs. Reid in the interval between the incident with her grandson and her treatment by Dr. Maloney,

were also consistent with this diagnosis. As well, it was his view that Mrs. Reid's stated history of having continued to work normal hours, carry out her normal household duties, and walk in high heeled shoes was consistent with her having suffered merely a muscular injury when lifting her grandson.

[355] Dr. Erwin's opinion was that it is likely that Mrs. Reid suffered a herniated disc when she bent over and picked up her grandson. Certainly the flexion, tortion, and load carrying movement that Mrs. Reid made when she bent over to catch her grandson on the stairs and then caught and lifted him is consistent with the type of activity that various experts indicated could cause disc injury. I accept, as well, that patients' symptoms are extremely variable.

[356] However, I do not accept as valid a number of the reasons that Dr. Erwin relies upon as the basis for his opinion and as a consequence, do not accept his opinion. He said that he understood that Mrs. Reid's back pain was not improving and was different from normal. That was not her evidence. Mrs. Reid described the pain she felt after lifting her grandchild as uncomfortable but not unfamiliar. In other words, the pain was not different from usual. As well, on her evidence, the pain was improving. She said that the massage therapy she underwent improved her pain, although it was still there.

[357] Dr. Erwin also based his opinion on his understanding that Mrs. Reid's pain was severe enough that she took analgesics and muscle relaxants before her first appointment with Dr. Maloney. However, the evidence was that the analgesics and muscle relaxants were not prescribed until Mrs. Reid's March 7 visit with Dr. Zalapsky, some three weeks after the incident with her grandchild. As well, the pharmacy records show that Mrs. Reid filled only one prescription on March 7 – for 30 tablets of Novo Difenac. There was no evidence before me about whether this drug was an analgesic or a muscle relaxant but in any event, it is apparent that she did not fill this prescription until March 7 and so was not taking this drug for a long time period as appears to have been assumed by Dr. Erwin. Additionally, she appears to have filled only one of the two prescriptions Dr. Zalapsky gave her and so it cannot be said that she was taking both an analgesic and a muscle relaxant.

[358] Nor do I accept Dr. Erwin's opinion that Dr. Zalasky's statement in his chart on March 7, 2000 that Mrs. Reid's symptoms showed no evidence of prolapsed intervertebral disc was inaccurate. Dr. Erwin found it significant that Mrs. Reid was unable to bend backwards and said this could have been evidence of an inflammation of the facet joints or a disc that protrudes posteriorly. However, there are many other possible explanations for this, including muscle spasm and simple lack of flexibility. Dr. Erwin did not examine Mrs. Reid and no other expert found this inability at all significant. I conclude that Dr. Erwin is speculating when he suggests that Mrs. Reid's stated inability to bend backwards means that she was likely already suffering from a prolapsed disc.

[359] I also reject Dr. Erwin's opinion that because Mrs. Reid's symptoms appeared to progress between March 7 and March 9, this was evidence of her suffering a prolapsed disc

before she saw Dr. Maloney. He also said in relation to the evidence he had read that Mrs. Reid felt somewhat better after her first visit with Dr. Maloney that this seemed to indicate that Mrs. Reid was improving. In my view, it is illogical to say that progression of symptoms lends credence to the opinion that Mrs. Reid suffered a prolapsed disc when she lifted her grandchild but improvement after her first appointment with Dr. Maloney does not lead to the conclusion that she had not suffered a prolapsed disc before March 10.

[360] Mrs. Reid's back problems on March 9 when she went to see Dr. Maloney were caused either by muscle sprain or by a bulging disc. However, her L5-S1 disc had not herniated at that time although it may have bulged as a result of the incident with her grandchild. The evidence of Dr. Erwin was that a herniated disc results in serious pain because the outer membranes of the annulus have sensory neurons and because once a disc extrudes from the spinal cord, it may contact and put pressure on other structures such as the spinal nerve roots. Mrs. Reid's pain before she underwent chiropractic manipulation was not severe. As I have found, she continued her normal activities and she was taking no analgesics for the major part of that time.

[361] I also conclude that the herniation at L5-S1 did not occur on March 9 although the manipulation may have put more pressure on a bulging disc and caused nerve irritation. I accept the evidence of Dr. Conway that the manipulations which Mrs. Reid underwent on March 9 was not conservative treatment. They were designed to and did put pressure on her spine, particularly on the vulnerable L4- S1 area at which she had previous surgery. Dr. Lavoie was of the same view. He was familiar with the procedure and said that in his opinion this manipulation would create a rotational force across the lumbar spine and would increase strain across the lumbar disc. I accept his evidence.

[362] For the reasons I have set out earlier in this judgment, I reject the evidence of Dr. Symons that the forces applied to a lumbar spine in chiropractic manipulation are negligible and, in any event, a red herring. Instead, I agree with the conclusion reached by Shelley, J. in ***Malinowski***. From her reasons, it is evident that Dr. Symons gave similar evidence in ***Malinowski*** to that which he gave in this trial. At para. 265, Shelley, J said the following:

> I note that in this sense the testimony of Dr. Symons appears to lead to some peculiar conclusions. If the forces exerted during a chiropractic adjustment are so slight as to never or almost never have possible deleterious consequences to even a damaged intervertebral disc, a structure well known to be injured under even unremarkable circumstances, then what kind of possible biological and biophysical effect could result from a chiropractic adjustment?

[363] It is illogical to claim that the forces in chiropractic adjustment are so slight that they could almost never have deleterious consequences, to say at the same time, that other seemingly innocuous spinal forces, such as a cough or a sneeze could have deleterious consequences and to say, as well, that chiropractic manipulation has positive benefits.

[364] Although, as I have said, forces were exerted on Mrs. Reid's lower spine by the manipulations undertaken by Dr. Maloney on March 9, nonetheless, she did not testify to serious pain during or immediately following that manipulation.

[365] She did, however, suffer back spasm that evening and overnight. Dr. Lavoie's opinion was that the symptoms Mrs. Reid exhibited on March 10 were indicative of increased nerve root irritation which could have been discal in origin. In respect to the muscle spasm that Mrs. Reid reported she had suffered the night before, Dr. Lavoie called it an involuntary reaction to an injury and said it was a classic symptom in someone with lumbar disc herniation although it was certainly prevalent in reaction to other problems as well, such as acute back strain.

[366] I conclude from this evidence that the manipulations may have caused some nerve root irritation. This would be consistent with her having suffered a bulged disc when she lifted her grandson, exacerbated by the manipulation. However, as Dr. Lavoie said, the spasm is also consistent with other possible causes and is not determinative.

[367] However, the spasm should have raised more questions in the mind of Dr. Maloney about what he was dealing with. I have already set out my conclusion that Dr. Maloney should have gotten more information before commencing active treatment of Mrs. Reid. He was not aware of how vulnerable Mrs. Reid was to spinal manipulation in the area of her previous surgery. Although he could have seen her scar when he examined her, he did not know what kind of surgery she had in the past. Nor was he aware of her extensive history of degenerative disc disease. He was aware that she had pain radiating into her leg on straight leg raise and was aware from Mrs. Reid's report to him, that she had reacted to the first manipulation with back spasm. In this regard, I agree with Dr. Conway's opinion. He said if he were the treating chiropractor of a patient who showed a new symptom such as spasm after initial treatment, he would want to determine exactly where the spasm was and do further tests before offering further treatment. Dr. Maloney did not do this. He should have.

[368] Instead, Dr. Maloney proceeded on March 10 to again manipulate the same area of Mrs. Reid's spine and, in this second treatment, did more manipulations than he had the previous day. I have concluded on a balance of probabilities that the manipulations done on March 10 were the cause of damage to Mrs. Reid's spine – likely causing the L4-5 disc extrusion that was ultimately confirmed in the MRI on April 6, 2010.

[369] Mrs. Reid felt immediate and severe pain during the March 10 manipulation. The evidence was that a disc extrusion through the annulus will cause pain because of the presence of nerves in the outer layers. After this manipulation, Mrs. Reid's symptoms grew markedly worse. This is also consistent with the injury having been caused at this time. She also had pain in her right hip and immediate weakness in both legs. By that evening, her right leg was in severe spasm. This was a markedly different symptom that she had reported to Dr. Maloney before the treatment when she described left leg spasm.

[370] I accept the evidence of Dr. Lavoie, whose opinion was that pressure such as Dr. Maloney described as having applied to Mrs. Reid could cause movement in the spine of a slim woman, such as Mrs. Reid. In his opinion the described manipulation would apply stress to the disc. I am satisfied that the stress applied was sufficient, in Mrs. Reid's case, to cause the disc to rupture. I accept Dr. Lavoie's opinion that "something untoward" happened as a consequence of the manipulation on March 10 – likely the disc extrusion at L4-5. The sudden onset of increased pain in Mrs. Reid's opposite leg was consistent with this, in his opinion.

[371] On the basis of Dr. Lavoie's evidence, I am satisfied, as well, that were it not for the manipulation on March 10, the back injury Mrs. Reid suffered when she lifted her grandson would likely have improved on its own over the succeeding few months. His evidence was that the most likely progression from the initial injury in 90-95% of cases was that it would get better on its own over three or four months. He said neither the literature nor his own experience caused him to conclude that it would inevitably lead to a disc extrusion in the vast majority of people. I accept this evidence.

[372] Because there is no evidence to support it, I do not accept Dr. Henderson's opinion that Mrs. Reid's symptoms after March 10 were caused spontaneously by Mrs. Reid's activities of daily living and that, at most, the manipulation on March 10 exacerbated her condition. Nor do I accept Dr. Erwin's opinion that Mrs. Reid's severe back injury occurred when she lifted her grandson. The absence of increasing symptoms until March 10 and the sudden increase after March 10 cannot be explained as a simple progression of the February 15 injury.

[373] Instead, I prefer Dr. Lavoie's opinion that while it is possible that Mrs. Reid's injury was caused simply by wear and tear, this explanation discounts the temporal aspect of her injury. All of the experts agreed that the temporal aspect was an important component in determination of causation. Mrs. Reid's sudden severe pain on March 10 and immediately worsened and different symptoms are consistent with a trauma related injury and inconsistent with a gradual tear.

[374] As for the further manipulation on March 13, it is clear from the evidence that Mrs. Reid's symptoms worsened after this treatment. However, I am not able to conclude on the evidence that Dr. Maloney activated the Thompson drop table and used it on March 13. The fact that there was nothing in his notes to indicate this is not determinative, given the evidence that his notes were incomplete in many respects. However, Dr. Maloney testified that in his professional judgment, it would never be appropriate to use both the blocks and the Thompson drop table together to treat a slight woman such as Mrs. Reid. Given that opinion, it is unlikely, in my view, that when faced with a patient who was obviously in as much pain as Mrs. Reid was on March 13, anyone with Dr. Maloney's training would have used the combination of treatments. Further, Dr. Maloney has some memory of this visit because, as he says, it was so unusual. He specifically said he did not use the drop table apparatus on Mrs. Reid. I also have the evidence of the sound the drop table makes. It is not consistent with the 'swoosh' sound described by Mr. and Mrs. Reid. I have concluded therefore that Mrs. Reid is mistaken in

thinking that the drop mechanism was used. Exactly what did happen to cause her to feel like she had dropped is unclear but I will not speculate.

[375] There was some evidence, as well, that Dr. Maloney had not used the blocks properly on March 13. Dr. Conway testified that a patient should be positioned prone on the blocks and both Dr. Maloney and Mr. and Mrs. Reid testified that Mrs. Reid was positioned supine on the blocks. It is possible that this manouevre could have worsened Mrs. Reid's condition. Certainly, she experienced more severe pain after this procedure. Nonetheless, I accept Dr. Maloney's evidence that he applied only light pressure to Mrs. Reid's hips. Mrs. Reid was not certain how heavy the pressure was and, again, I am satisfied that Dr. Maloney would have and did proceed with extreme caution given Mrs. Reid's presentation that day. In any event, the bulk of the evidence points to the March 10 manipulation as the cause of the sequestered disc. At most, the treatment done by Dr. Maloney on March 13 exacerbated an already existing extruded disc.

[376] In the result, I find on a balance of probabilities that Dr. Maloney's manipulation of Mrs. Reid's back on March 10, 2000 caused or substantially contributed to Mrs. Reid's injury and that, but for this manipulation, the injury she sustained when she caught her grandchild would have subsided. Whether or not the injury was exacerbated by the further treatment on March 13, it was Dr. Maloney's March 10 manipulation that caused the sequestration of Mrs. Reid's disc and resulted in her having to undergo surgery on her back.

[377] Costs may be spoken to if the parties are unable to agree.

Heard from June 14-30, 2010.
Dated at the City of Edmonton, Alberta this 13th day of December, 2010.

D.C. Read
J.C.Q.B.A.

Appearances:

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