

XIII. Legal Obligations of a DC for radiographic Use (Case Law, Judge's decisions)

Introduction

As noted in Sections III and VI above, some DACBRs claim that Chiropractic Clinicians are over-exposing the public, taking unnecessary initial X-rays, criminal for taking any post X-rays, have no evidence-based support for subluxation assessment with spinal radiography, X-rays should only be recommended in "Red Flag" cases, and that X-rays are seldom useful in deriving the sequence of care that will be given to an individual patient. Having already addressed the science behind several of these claims, this section now explores whether there is legal authority in support of the DACBRs' claim that X-rays should only be recommended in "Red Flag" cases. Additionally, the new CCGPP Guidelines do not support routine chiropractic radiographic evaluation, i.e., "x-rays for routine uncomplicated cases are not supported" (www.ccgpp.org).

While this panel is in agreement with the DACBRs that X-rays should be performed in so-called "Red Flag" cases, this panel does not believe that the use of X-rays should be limited or restricted only to those instances. An examination of the applicable statutes and case law concerning chiropractors and their use of X-rays reveals little, if any, support for the DACBRs' and CCGPP's position that chiropractors' use of X-rays should be restricted to "Red Flag" cases.

The Majority of States Provide Diagnostic X-ray Privileges to Licensed Chiropractors

An overwhelming majority of states extend broad diagnostic X-ray privileges to licensed chiropractors by statute, either expressly or impliedly¹. Many states require their licensure examinations to test the applicants' knowledge of X-ray diagnosis and technique². Furthermore, in several states the eligibility requirements for a license demand a minimum number of hours spent studying X-ray diagnosis and technique³. Our brief search revealed that at least forty (40) states are characterized by one or more of the previous statements.⁴

The majority of states generally define the scope of chiropractic care to include the use of X-rays for diagnostic purposes, either expressly or implied. Though the precise statutory language often differs there is remarkable consistency among the states to allow chiropractors the use of X-rays to diagnose patients. Sections of several statutes expressly and implied, allowing the use of X-rays are provided here to illustrate the point.

General Statutes of Connecticut, Section 20-28(b) – Any chiropractor who has complied with the provisions of this chapter may:

...

(2) Examine, analyze and diagnose the human living body and its diseases, and use for diagnostic purposes the X-ray or any other general method of examination for diagnosis and analysis taught in any school or college of chiropractic which has been recognized and approved by the State Board of Chiropractic Examiners;

Delaware Code, Title 24, §701(b) – The practice of chiropractic includes, but is not limited to, the diagnosing and locating of misaligned or displaced vertebrae (subluxation

complex), using X-rays and other diagnostic test procedures. Practice of chiropractic includes the treatment through manipulation/adjustment of the spine and other skeletal structures and the use of adjunctive procedures not otherwise prohibited by this chapter.

Idaho Statutes, Title 54, Section 704 – CHIROPRACTIC PRACTICE.

Chiropractic practice and procedures which may be employed by physicians are as follows:

- (1) The system of specific adjustment or manipulation of the articulations and tissues of the body; the investigation, examination and clinical diagnosis of conditions of the human body and the treatment of the human body by the application of manipulative, manual, mechanical, physiotherapeutic or clinical nutritional methods and may include the use of diagnostic X-rays.

Indiana Code, 25-10-1-1(1) – “Chiropractic” means the diagnosis and analysis of any interference with normal nerve transmission and expression, the procedure preparatory to and complementary to the correction thereof by an adjustment of the articulations of the vertebral column, its immediate articulation, and includes other incidental means of adjustments of the spinal column and the practice of drugless therapeutics. However, chiropractic does not include any of the following:

...

- (F) the taking of X-rays of any organ other than the vertebral column and extremities;...

Despite the differences in language, notice that each of the above statutes allows licensed chiropractors to perform X-rays for diagnostic purposes. The same is true for each of the forty states reviewed by this panel. Indiana’s definition of “chiropractic” is included to illustrate how some statutes imply that the use of diagnostic X-rays is within the scope of chiropractic care without expressly stating as much. Here, Indiana expressly prohibits “the taking of X-rays of any organ *other than* the vertebral column and extremities.” The statutory, and likely obvious, implication is that X-rays of the vertebral column and extremities is permissible.⁵

Of greater significance is the absence in the statutes of additional guidelines, limitations, or restrictions of chiropractors’ use of diagnostic X-rays⁶. No statute reviewed by this panel sets forth any criteria chiropractors should employ in determining whether X-ray diagnosis is appropriate for a given patient in a given circumstance. No legislature has specified any ailments or injuries for which diagnostic X-rays are required or prohibited. State legislatures have effectively left the determination of when to use diagnostic X-rays in the discretion of the individual chiropractors. This is in direct conflict with the restrictions suggested by DACBRs and the CCGPP Guidelines.

X-ray Diagnosis is Rarely Grounds for Disciplinary Action

All of the states reviewed by this panel provide grounds for their respective board of chiropractic examiners (board) to take disciplinary action against a chiropractic licensee⁷. Those disciplinary grounds are enumerated in the same statutes which create that state’s board, establish the board’s rulemaking authority, and dictate the procedures the board must abide by. By enumerating the disciplinary grounds in this way the legislatures of the individual states are achieving two important functions. First, it

provides the licensed chiropractor advance warning of conduct which may precipitate disciplinary action. Second, it specifically limits the grounds on which the board can take disciplinary action.

Below is a section of the Iowa statute as a brief example of enumerated grounds for disciplinary action. There is a maxim of statutory interpretation which requires special mention here; *expressio unius est exclusio alterius*. A loose translation of this phrase means roughly, the expression of one at the exclusion of others. Under this maxim, where a statute specifies one exception to a general rule or assumes to specify the effects of a certain provision, other exceptions or effects are excluded⁸.

2005 Merged Iowa Code and Supplement, Title IV, §151.9 – Revocation or suspension of license.

A entry to practice as a chiropractor may be revoked or suspended when the licensee is guilty of the following acts or offenses:

1. Fraud in procuring a license.
2. Professional incompetency.
3. Knowingly making misleading, deceptive, untrue or fraudulent representations in the practice of the licensee's profession or engaging in unethical conduct or practice harmful or detrimental to the public. Proof of actual injury need not be established.
4. Habitual intoxication or addiction to the use of drugs.
5. Conviction of a felony related to the profession or occupation of the licensee or the conviction of any felony that would affect the licensee's ability to practice as a professional chiropractor. A copy of the record of conviction or plea of guilty shall be conclusive evidence.
6. Fraud in representations as to skill or ability.
7. Use of untruthful or improbable statements in advertisements.
8. Willful or repeated violations of the provisions of this Act.

Though enumerating fewer grounds for disciplinary action than many states, the content of the Iowa statute above is common to most states. Note the absence of any provision allowing the board to take disciplinary action for a chiropractor's performing or failing to perform diagnostic X-rays. Applying the maxim of *expressio unius est exclusio alterius*, it is clear that neither the performance of diagnostic X-rays nor the lack thereof are grounds for disciplinary action. This is also common to a majority of states, with the exceptions of Colorado and Oregon which expressly mention "X-ray" in their disciplinary statutes. The relevant portions of the Colorado and Oregon statutes are as follows:

Colorado Revised Statutes, §12-33-117(1) - Upon any of the following grounds, the board may issue a letter of admonition to a licensee or may revoke, suspend, deny, refuse to renew, or impose conditions on such licensee's license:

- (v) Engaging in any of the following activities and practices: Willful and repeated ordering or performance, without clinical justification, of demonstrably unnecessary laboratory tests or studies; the administration, without clinical justification, of treatment which is demonstrably unnecessary; the failure to obtain consultations or perform referrals when failing to do so is not consistent with the standard of care for the profession; or ordering or performing, without clinical justification, any service, X-ray, or

treatment which is contrary to recognized standards of the practice of chiropractic as interpreted by the board;

Oregon Revised Statutes, §684-100(1) – The State Board of Chiropractic Examiners may refuse to grant a license to any applicant or may discipline a person upon any of the following grounds:

...

(B) Willful ordering or performance of unnecessary laboratory tests or studies; administration of unnecessary treatment; failure to obtain consultations or perform referrals when failing to do so is not consistent with the standard of care; or otherwise ordering or performing any chiropractic service, X-ray or treatment that is contrary to recognized standards of practice of the chiropractic profession.

The Colorado and Oregon statutes impose disciplinary action for “performing X-rays where contrary to recognized standards of the practice of chiropractic” as interpreted by either the board or the profession, respectively. These two statutes begin to point to the crux of the matter at hand, as well as the further unraveling of any legal support for the DACBRs and the CCGPP Guidelines to restrict the use of X-ray diagnosis to “Red Flags.”

In addition to the “recognized standards of the practice of chiropractic” mentioned in the Colorado and Oregon statutes, nearly every other state imposes disciplinary action for “unethical conduct,” “unprofessional conduct,” or for falling below the “reasonable standard of care” for chiropractors. Though most states fail to explicitly mention X-rays in their grounds for disciplinary action, it is a safe assumption that X-ray diagnosis or a lack thereof may be considered unethical, unprofessional, or falling below the standard of care under certain circumstances.

The question now becomes “under what circumstances?” Referring to the statutes provides no assistance in attempting to answer this question. Not being chiropractors, legislators deliberately draft such legislation to be open-ended so as to ensure general applicability. They are reluctant to establish highly specific or rigid standards, preferring instead that the determination of unprofessional or unethical conduct be done on a case-by-case basis. Legislators understand that each patient and situation is different and that “one-size-fits-all” is not a workable standard. Therefore, one must examine the relevant case law (jury verdicts and judicial rulings) to see whether clear and consistent standards have been developed.

A Survey of Relevant Case Law Provides No Clear Standards, and Therefore Does Not Support Limiting Diagnostic X-rays to “Red Flags”

As noted above, whether specific conduct is “unethical,” “unprofessional,” “contrary to recognized standards”, or below the “standard of care” is determined on a case-by-case basis. The particular circumstances surrounding each case are rarely identical, if ever. Thus, conduct deemed unethical or unprofessional in one situation may be appropriate, justified, or at least understood in another.

Generally speaking, the case-by-case analysis is only performed because the parties to a dispute failed to reach a settlement and opted to go to trial. A judge or jury often determines the nature of the chiropractor’s conduct based on the credibility and

rationale expressed by one or more expert witnesses. The following from *Ford v. Peters*, 2005 U.S. Dist. LEXIS 9262, 19-20, provides a superb explanation of this phenomenon;

“Most courts...hold that the duties of chiropractors to their patients...include: (1) a duty to exercise reasonable care in the diagnosis and treatment of their patients, including reasonable care in determining whether chiropractic treatment is appropriate in a particular situation...

Further, in most of these jurisdictions, the standard of care is generally defined with its scope determined by expert testimony as to the standard of care appropriate under the circumstances.”

This panel conducted a thorough search of federal and state cases involving chiropractors and their standard of care applicable to both the use and lack of use of diagnostic X-rays. Upon completing this search the panel concludes that the relevant case law yields no uniform standards which suggest chiropractors should limit their use of diagnostic X-rays to “Red Flag” cases.

There are three primary findings which undercut the existence of a uniform standard. The first is the sheer lack of authoritative cases. Very few cases exist which have directly at issue a chiropractor’s performing or failing to perform X-rays. One can speculate wildly about the reasons for the absence of such cases. Perhaps patients rarely have complaints about their chiropractor’s use of X-rays. Of those that do complain, it is possible a settlement is reached or the patient is satisfied with any disciplinary action taken by the board and decides not to pursue it any further. Among the cases that do make it to trial, few appeals are taken beyond a state circuit court. A decision by the Court of Appeals of Louisiana, Second Circuit has no authority over out-of-state courts, and only persuasive authority among the other circuit courts of Louisiana.

Second, there is little or no consistency between the verdicts and judicial rulings of the few relevant cases. The following case reviews will demonstrate this lack of consistency.

- a. *Thomas v. Farris*, 175 S.W.3d 896; 2005 Tex. App. LEXIS 8798 (2005). - The patient was involved in an automobile accident, after which she consulted the chiropractor for treatment. Thereafter, she fell and developed severe hip pain. She ultimately had a total replacement of her left hip. The patient and her husband brought an action against the chiropractor and claimed he was negligent in failing to x-ray the patient's hips and discover fractures incurred after the accident. The trial court granted the chiropractor summary judgment and the court affirmed on appeal. One witness testified that, in his opinion, the chiropractor should have taken x-rays of the patient's hips, but the witness provided no testimony that, if such conduct of the chiropractor was a violation of the standard of care for chiropractors, it caused or exacerbated the patient's hip fractures. There was no testimony that the patient's failure to stay off her leg caused further injury. Because there was no material fact issue raised by the evidence that the chiropractor's actions or omissions was a proximate cause of the patient's injuries, summary judgment in the chiropractor's favor was proper. The court of appeals affirmed.

- b. *Goodman v. Holder*, 8 Pa. D. & C.4th 261; 1990 Pa. D. & C. LEXIS 384 (1990). - The patient was in an automobile accident in which she sustained a fractured sternum, multiple cuts and bruises, a fracture of the left elbow and shoulder and spondylolisthesis at L5-S1. The chiropractor treated the patient on numerous occasions. The patient alleged that during the period of treatment, the chiropractor never prescribed X-rays for her, which would have revealed the fracture to the sternum, left elbow, and shoulder. She further alleged that chiropractor never obtained a complete medical history. The patient's main contention was that the chiropractor's conduct amounted to both a breach of chiropractic standard of care and a breach of the normal standards of care in the community. The chiropractor's objection lay solely with the sufficiency of facts set forth and whether the facts presented an issue of punitive damages that should go to the jury. The court held that the failure of the chiropractor to take x-rays constituted negligence and that the patient alleged facts sufficient to constitute a possible claim for punitive damages. Also, the court held that chiropractic standards were to be applied in the same manner that standards for physicians were applied. The court denied the chiropractor's preliminary objections in the nature of a demurrer.
- c. *Fletcher v. Fenoli*, 674 So. 2d 1048; 1996 La. App. LEXIS 842 (1996). - The patient was a 63-year-old woman who sought chiropractic treatment following a stroke. The chiropractor took a medical history and x-rays of her spine, which revealed diffuse osteoporosis. During a manipulation of the patient's spine, which involved pushing on her crossed arms, one of her arms was fractured. The trial judge rejected the deposition testimony of the patient's expert witness who testified that in light of the patient's medical condition, x-rays of the arm and shoulder area should have been taken since those parts were affected by the stroke. The trial judge adopted the opinion of the chiropractor's expert who testified that the chiropractor was not negligent in failing to x-ray the patient's arm and shoulder because he was not adjusting or manipulating that area. The court held that it would not disturb the findings of the trial court absent clear error, and that based on the record, the trial court was not manifestly erroneous in accepting the testimony of the chiropractor's expert. The court further held that the doctrine of res ipsa loquitur was not applicable, but if it had been, the chiropractor sufficiently rebutted the inference of negligence. The court of appeals affirmed the judgment of the trial court.
- d. *Salazar v. Ehmman*, 505 P.2d 387; 1972 Colo. App. LEXIS 923; 58 A.L.R.3d 585 (1972). - The patient alleged that the chiropractor negligently failed to take x-rays of the patient's shoulder, which was broken and dislocated, and to refer the patient to a medical doctor. A jury returned a verdict for the patient, and the court affirmed. The court found no abuse of the trial court's discretion in allowing plaintiff's counsel to inquire on voir dire if the prospective jurors had any interest in the chiropractor's insurance carrier. Similarly, there was no abuse of the trial court's discretion when it refused to allow a purported "impeachment" witness to testify. The court found that the trial court acted within its authority under *Colo. R. Civ. P. 16(d)(3)* in refusing to allow a witness to testify when the chiropractor knew of the witness but failed to include the witness's name on a witness list pursuant to a pre-trial order. The trial court properly admitted testimony on the

- chiropractic oath since that evidence had probative value upon the issue of the standard of conduct agreed to by all chiropractors in Colorado. Finally, the court concluded that the instructions given to the jury properly identified the material questions of fact in controversy and stated the law. The trial court's judgment for the patient was affirmed.
- e. *Attorney General v. Beno*, 373 N.W.2d 544, 422 Mich. 293 (1985). – This case addressed allegation that Beno provided services which were not authorized within the scope of chiropractic practice. The court noted that under § 16401(1)(b)(iii), the practice of chiropractic includes, “. . . the use of x-ray machines in the examination of patients for the purpose of locating spinal subluxations or misaligned vertebrae of the human spine.” Furthermore, the court held that “Rather than authorizing general diagnostic techniques, the statute limited chiropractors to those methods which might reveal the existence of misaligned or displaced vertebrae.”
 - f. *Goldstein v. Janusz Chiropractic Clinics*, 218 Wis.2d 683, 582 N.W.2d78. (1998). The patient alleged that the chiropractor was negligent for failing to detect and inform the patient of an abnormal mass revealed on an x-ray. The court held that, “Although chiropractors may take and analyze x-rays, they may only do so for diagnostic or analytical purposes in the practice of chiropractic.” The purpose of such an examination, under Wis. Adm. Code Section Chir 4.03 includes "determin[ation of] the existence of spinal subluxations...."

Much of this inconsistency in the case law is due to the third finding which undercuts the existence of a uniform standard, which is the “battle of the experts.”

The “battle of the experts” is an unfortunate consequence of the situation described in *Ford v. Peters*. The adversarial nature of a trial combines with the need to establish whether a chiropractor’s conduct was reasonable under the circumstances to create confusion among judges and juries. At times, the “battle of the experts” results in the complete absence of any standard as demonstrated in *Tilden v. Board of Chiropractic Examiners*, which stated, “If reasonable chiropractors could differ, then the failure to perform the procedures is not necessarily evidence that the petitioner acted outside an acceptable range of care.” 135 Ore. App. 276; 898 P.2d 219; 1995 Ore. App. LEXIS 958.

Along this line, in discussing the French Society of Orthopaedic and Osteopathic Manual Medicine radiography guidelines, Maigne⁹ stated, “*past verdicts and settlements have shown that in cases of post-manipulation complications, the absence of X-rays prior to manipulation is regarded, by the experts, as failure to conform to the standard of care (malpractice), even if prior X-rays could not, under any circumstances, have prevented the occurrence of the complications.*” Therefore, it may be wise to obtain initial spinal radiographs of the intended spinal region where treatment is to be directed; this may avoid the hypocrisy of the ‘battle of the experts’ circumstance.

The “respectable minority doctrine.” The most common legal definition of standard of care is how similarly qualified practitioners would have managed the patient's care under the same or similar circumstances. This is not simply what the majority of practitioners would have done. The courts recognize the respectable minority rule. A number of states

recognize it as a malpractice defense that the defendant acted in accordance with the custom of at least a "respectable minority," or recognized subgroup, of the relevant profession, even though his or her actions were at odds with mainstream professional practice.¹⁰

Conclusions

1. Chiropractors are authorized to employ spinal x-ray examinations in all 50 states of the U.S.
2. Statutes, rules and regulations concerning the practice of chiropractic do not explicitly limit the use of x-ray examinations to cases where "red flags" are present.
3. Some courts have explicitly upheld the use of chiropractic x-rays to detect or determine the presence of spinal subluxations.
4. Courts generally recognize that standard of care may be established under the respectable minority rule.

References

1. *See* Ala. Code § 34-24-120(b) (1975); Ark. Code § 17-18-102(6)(B) (2006); General Statutes of Connecticut, Sections 20-28(a) and (b); Del. Code Ann. 24, § 701(b) (2006); Fla. Stat. § 460.403(9)(b) (2005); Idaho Code § 54-704(1); Ind. Code § 25-10-1-1(1)(F) (1981); Kentucky Revised Statutes, Section 312.015; La Stat. Ann. §§36-2801 and 2817 (2006); 32 Me. Rev. Stat. Ann. § 451(3) (1993); Mich. Comp. Laws § 333.16401(1)(b)(iii) (1978); Minn. Stat. § 9505.0245 (2005); Mo. Rev. Stat. § 331.010.1-4 (2005); Mont. Code Ann. § 37-12-104 (2005); Neb. Rev. Stat. § 71-177 (2005); N.H. Rev. Stat. Ann. § 316-A:1 (2005); N.J. Stat. Ann. § 45:9-14.5 (2006); N.M. Stat. Ann. § 61-4-2 (1978); N.C. Gen Stat. § 90-153 (2005); N.D. Cent. Code § 43-06-01 (2005); Ohio Rev. Code Ann. § 4734.15 (2001); Or. Rev. Stat. Ann. § 684.010 (2005); R.I. Gen. Laws § 5-30-11; S.C. Code Ann. § 40-9-10 (2005); Tenn. Code Ann. §§ 63-4-102, 63-4-119 (2003); Tex. Code Ann. §§ 201.002, 201.452 (2005); Utah Code Ann. § 58-73-601 (2006); Vt. Stat. Ann. tit. 26, § 521 (1991); Wash. Rev. Code § 18.25.005; Wyo. Stat. Ann. § 33-10-101 (2005).
2. *See* Alaska Stat. § 08.20.120(a)(3)(B)(iii) (2004); Ariz. Rev. Stat. § 32-922 (2006); Ark. Code § 17-18-306(a)(1)(E) (2006); Conn. Gen. Stat. § 20-28(a)-(2) (2005); Haw. Rev. Stat. § 442-6 (2005); Ky. Rev. Stat. Ann. § 312.115 (1988); Md. Code Ann. § 3-304(d)(4)(vii) (1992); Mass. Gen. Laws ch. 112, § 94 (2005); Nev. Rev. Stat. § 634.070 (1997); N.H. Rev. Stat. Ann. § 316-A:13 (2005); N.D. Cent. Code § 43-06-10 (2005); Okla. Stat. tit. 59, § 161.8 (1989); Or. Rev. Stat. Ann. § 684.050 (1997); R.I. Gen. Laws § 5-30-9; S.C. Code Ann. § 40-9-10 (2005); S.D. Codified Laws § 36-5-12 (1993); Vt. Stat. Ann. tit. 26, § 532 (1991); Wash. Rev. Code. § 18.25.030.
3. *See* Ariz. Rev. Stat. § 32-922 (2006); Ark. Code § 17-18-306(a)(1)(E) (2006); Colo. Rev. Stat. § 12-33-111(1)(a) (2005); Kentucky Revised Statutes, Section 312.115; Miss. Code Ann. § 73-6-13(1) (2006); N.C. Gen Stat. § 90-143.2 (2005).
4. Whether the scope of chiropractic care in the remaining ten (10) states precludes the use of diagnostic X-rays or lacks similar testing and educational requirements is unknown to the panel at this time, as access to those states' statutes was not readily accessible. However, this panel is confident that upon reviewing the applicable statutes of those

- remaining states that few, if any, would fail to include the use of diagnostic X-rays in the scope of chiropractic care. Not a single state's statutes this panel reviewed failed to include diagnostic x-rays in the scope of chiropractic care, either expressly or impliedly.
5. *Expressio unius est exclusio alterius* is a maxim of statutory interpretation meaning that the expression of one thing is the exclusion of another. Under this maxim, if a statute specifies one exception to a general rule or assumes to specify the effects of a certain provision, other exceptions or effects are excluded.
 6. Some states statutorily limit or prohibit the use of X-ray treatment or X-ray therapy. However, no state statute reviewed by this panel imposed limitations or an outright prohibition on the use of X-rays for diagnostic purposes.
 7. Cal. Business and Professions Code § 725; Colo. Rev. Stat. § 12-33-117(1)(v) (2005); Conn. Gen. Stat. §20-29 (2005); Del. Code Ann. 24, § 711 (2006); Fla. Stat. § 460.413 (2005); Ga. Code Ann. § 43-9-12 (2006); Idaho Code § 54-712; Ind. Code § 25-1-9-4 (1981); Iowa Code § 151.9 (2005); Ky. Rev. Stat. Ann. § 312.150 (1988); La. Stat. Ann. § 36-2816 (2006); 32 Me. Rev. Stat. Ann. § 503-A(2) (1993); Md. Code Ann. § 3-313 (1992); Miss. Code Ann. § 73-6-19 (2006); Mo. Rev. Stat. § 331.060.1-4 (2005); Nev. Rev. Stat. § 634.140 (2003); N.H. Rev. Stat. Ann. § 316-A:22 (2005); N.M. Stat. Ann. § 61-4-10 (1978); N.C. Gen Stat. § 90-154.2 (2005); N.D. Cent. Code § 43-06-15 (2005); Ohio Rev. Code Ann. § 4734.31 (2001); Or. Rev. Stat. Ann. § 684.100 (2005); R.I. Gen. Stat. § 5-30-13; S.C. Code Ann. § 40-9-90 (2005); S.D. Codified Laws § 36-5-16 (2005); Tenn. Code Ann. § 63-4-114 (1998); Tex. Code Ann. §§ 201.502, 201.5025, 201.5026 (2005); Utah Code Ann. §§ 58-73-401, 58-73-501 (2006); Vt. Stat. Ann. tit. 26, § 541 (1991); W. Va. Code § 30-16-16 (2006); Wis. Stat. §§ 446.03, 446.04 (1991); Wyo. Stat. Ann. § 33-10-110.
 8. *Black's Law Dictionary* 581 (6th ed., West 1990).
 9. Jean-Yves Maigne. Is there a need for routine X-rays prior to manipulative therapy? Recommendations of the SOFMMOO French Society of Orthopaedic and Osteopathic Manual Medicine. www.sofmmoo.com/english_section/recommendations/radio.htm. Accessed May 29th, 2006.
 10. Furrow, B., T. Greaney, S. Johnson, T. Jost, and R. Schwartz. 1997. *Health Law*. 3d ed. St. Paul, MN: West. P. 198-202.