A New Keeper at the Gate

Predicting the Effect of the Revised Rule 702(a) on Medical Malpractice in North Carolina

BY MATTHEW D. BALLEW
Zaytoun Law Firm, PLLC
3130 Fairhill Drive, Suite 100
Raleigh, NC 27612
Tel: (919) 832-6690
Fax: (919) 831-4793
mballew@zaytounlaw.com

Table of Contents

I. Introduction

With the enactment of House Bill 542 in June 2011, the General Assembly amended Rule of Evidence 702(a), the general rule governing the admissibility of expert opinion testimony in North Carolina. Prior to this amendment, North Carolina's Rule 702(a) was essentially identical to the old version of Federal Rule of Evidence 702[1], and read simply that "[i]f scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion." N.C. Gen. Stat. 8C-702(a) (2010). As part of the General Assembly's latest round of "tort reform" efforts last year, North Carolina Rule 702(a) was revised to bring it in line the current Federal Rule of Evidence 702 (hereinafter "FRE 702").

FRE 702 itself was amended in December 2000 in response to the court's "gatekeeper" role as articulated in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) and its progeny. "The Federal Rules of Evidence Advisory Committee Note to its 2000 amendment of Rule 702 makes it clear that the intent of the amendment was to incorporate the principles set forth in *Daubert* and its progeny into the Federal Rules of Evidence." 1-4 *Brandis and Broun on North Carolina Evidence* § 113 (2012). Some legal scholars believe that because North Carolina's "Rule 702(a) has been rewritten to mirror FRE. 702 at the time the statute was enacted," then "this indicates a clear legislative intent to abandon the *Howerton* standard announced by our Supreme Court[2] in favor of the *Daubert* standard adopted by the United States Supreme Court as [currently] codified in F.R.E. 702." 1-702 *North Carolina Evidence Courtroom Manual* (2012). Others take a more cautious approach, saying that "[t]he amendment to the North Carolina rule could have the same effect, thus dramatically changing the approach announced in *Howerton*. Whether the North Carolina courts will interpret the amendment to put the state on the same path as the federal courts or whether the interpretation will be more in line with *Howerton* remains to be seen." 1-4 *Brandis and Broun*. Although the "extent to which *Howerton* and its progeny are overturned by the new Rule 702(a) remains to be determined," it is generally agreed upon that "trial courts will undoubtedly now look to federal caselaw for guidance with respect to the acceptability of scientific methods, at least until North Carolina caselaw is developed in this area." 1-702 *North Carolina Evidence Courtroom Manual*.

The intent of this manuscript is to predict the effects the revised Rule 702(a) will have on medical malpractice cases in North Carolina. As the plaintiff's bar well knows, for many years now there have been in place various procedural and evidentiary hurdles to filing and litigating medical malpractice actions in this state. As a result, a large body of case has emerged interpreting and

[1] See Sec. III(B), *infra*, for a discussion of FRE 702 and the landmark amendment in December 2000 in response to *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) and its progeny.

[2] See Sec. III(A), *infra*, for a discussion of *Howerton* and the prior law governing admissibility of scientific opinion testimony in North Carolina.

applying these technical rules in the North Carolina appellate courts. The challenge of this paper is to forecast which of these preexisting rules will be affected and to what extent. In the end, what follows is merely educated guesswork as we await the inevitable appellate opinions applying the new Rule 702(a).

II. New Rule 702 in N.C.

A. Amended Rule 702(a)

The newly amended North Carolina Rule of Evidence 702(a) reads as follows:

> ***Rule 702. Testimony by experts.***
> *(a) If scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion, or otherwise, if all of the following apply:*
> *(1) The testimony is based upon sufficient facts or data.*
> *(2) The testimony is the product of reliable principles and methods.*
> *(3) The witness has applied the principles and methods reliably to the facts of the case.*

The new rule can be broken down into five essential elements, all of which must be established in order for the trial court to deem any expert opinion testimony admissible: (i) the subject matter at issue must be one where "scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact[3];" (ii) the proposed expert must be qualified "by knowledge, skill, experience, training, or education" to render an opinion on the subject; (iii) the testimony must be "based upon sufficient facts or data;" (iv) the testimony must be "the product of reliable principles and methods;" ***and*** (v) the expert must have "applied the principles methods reliably to the facts of the case."

These elements represent a preliminary set of requirements for the admissibility of all expert opinion testimony, including standard of care, causation and damages opinions in a medical malpractice action. Each will be discussed below. It is critical to remember, however, that these "gatekeeper" requirements will operate in conjunction with the other evidentiary rules governing expert testimony in North Carolina.

B. Other provisions of Rule 702 relevant to medical malpractice

While the amendments to Rule 702(a) have been considered by many to be a seismic evidentiary shift toward the much-maligned "*Daubert* standard," it is easy to overlook the fact that many other provisions of North Carolina Rule 702 will continue to govern the admissibility of

[3] It has long been recognized in North Carolina that expert testimony is required in medical malpractice cases for the plaintiff to establish both breach in the standard of care, *See Hawkins v. SSC Hendersonville Operating Company,* 690 S.E.2d 840 (2010), as well as causation. *See Campbell v. Duke University Health System, Inc.*, 691 S.E.2d 31 (2010).

expert testimony in medical malpractice cases. The following sections of Rule 702 still apply specifically to medical malpractice expert opinions in North Carolina:

> ***Rule 702. Testimony by experts.***
>
> *(b) In a medical malpractice action as defined in G.S. 90-21.11, a person shall not give expert testimony on the appropriate standard of health care as defined in G.S. 90-21.12 unless the person is a licensed health care provider in this State or another state and meets the following criteria:*
>
> *(1) If the party against whom or on whose behalf the testimony is offered is a specialist, the expert witness must:*
>
> *a. Specialize in the same specialty as the party against whom or on whose behalf the testimony is offered; or*
>
> *b. Specialize in a similar specialty which includes within its specialty the performance of the procedure that is the subject of the complaint and have prior experience treating similar patients.*
>
> *(2) During the year immediately preceding the date of the occurrence that is the basis for the action, the expert witness must have devoted a majority of his or her professional time to either or both of the following:*
>
> *a. The active clinical practice of the same health profession in which the party against whom or on whose behalf the testimony is offered, and if that party is a specialist, the active clinical practice of the same specialty or a similar specialty which includes within its specialty the performance of the procedure that is the subject of the complaint and have prior experience treating similar patients; or*
>
> *b. The instruction of students in an accredited health professional school or accredited residency or clinical research program in the same health profession in which the party against whom or on whose behalf the testimony is offered, and if that party is a specialist, an accredited health professional school or accredited residency or clinical research program in the same specialty.*
>
> *(c) Notwithstanding subsection (b) of this section, if the party against whom or on whose behalf the testimony is offered is a general practitioner, the expert witness, during the year immediately preceding the date of the occurrence that is the basis for the action, must have devoted a majority of his or her professional time to either or both of the following:*
>
> *(1) Active clinical practice as a general practitioner; or*
>
> *(2) Instruction of students in an accredited health professional school or accredited residency or clinical research program in the general practice of medicine.*
>
> *(d) Notwithstanding subsection (b) of this section, a physician who qualifies as an expert under subsection (a) of this Rule and who by reason of active clinical practice or instruction of students has knowledge of the applicable standard of care for nurses, nurse practitioners, certified registered nurse anesthetists, certified registered nurse midwives, physician assistants, or other medical support staff may give expert testimony in a medical malpractice action with respect to the standard of care of which he is knowledgeable of nurses, nurse practitioners,*

certified registered nurse anesthetists, certified registered nurse midwives, physician assistants licensed under Chapter 90 of the General Statutes, or other medical support staff.

(e) Upon motion by either party, a resident judge of the superior court in the county or judicial district in which the action is pending may allow expert testimony on the appropriate standard of health care by a witness who does not meet the requirements of subsection (b) or (c) of this Rule, but who is otherwise qualified as an expert witness, upon a showing by the movant of extraordinary circumstances and a determination by the court that the motion should be allowed to serve the ends of justice.

(f) In an action alleging medical malpractice, an expert witness shall not testify on a contingency fee basis.

(g) This section does not limit the power of the trial court to disqualify an expert witness on grounds other than the qualifications set forth in this section.

(h) Notwithstanding subsection (b) of this section, in a medical malpractice action as defined in G.S. 90-21.11(2)b. against a hospital, or other health care or medical facility, a person shall not give expert testimony on the appropriate standard of care as to administrative or other nonclinical issues unless the person has substantial knowledge, by virtue of his or her training and experience, about the standard of care among hospitals, or health care or medical facilities, of the same type as the hospital, or health care or medical facility, whose actions or inactions are the subject of the testimony situated in the same or similar communities at the time of the alleged act giving rise to the cause of action.

The above admissibility provisions should remain in force and largely unaffected by the amendments to Rule 702(a). The same should be true for the substantial body of case law interpreting these rules. In order to appreciate the likely effects of the amendments to Rule 702(a) on medical malpractice opinion testimony it is necessary to briefly examine the context surrounding this evolution.

III. Context of the Change

A. *Goode*, *Howerton*, and the prior N.C. rules governing general admissibility of scientific opinion testimony

For many years it remained unclear whether North Carolina had adopted the federal standard to determine the admissibility of scientific opinion testimony as outlined in 1993 by the U.S. Supreme Court in *Daubert*. The confusion stemmed from the North Carolina Supreme Court opinion *State v. Goode*, 341 N.C. 513, 461 S.E.2d 631 (1995), wherein the Court appeared to cite the *Daubert* decision as guiding authority, saying:

> Thus, under our Rules of Evidence, when a trial court is faced with a proffer of expert testimony, it must determine whether the expert is proposing to testify to scientific, technical, or other specialized knowledge that will assist the trier of fact to determine a fact in issue. As recognized by the United States Supreme Court in its most recent opinion addressing the admissibility of expert scientific testimony, this requires a preliminary assessment of whether the reasoning or methodology

> underlying the testimony is sufficiently valid and whether that reasoning or methodology can be properly applied to the facts in issue.

Id. (citing *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993)). However, rather than announce that North Carolina had actually adopted the *Daubert* standard, the *Goode* court went on to cite its own prior case holdings to explain that North Carolina adheres to a three-pronged test governing the admissibility of scientific opinion testimony: (i) "whether a proffered method is sufficiently reliable," (ii) "whether the witness testifying at trial is qualified as an expert to apply this method to the specific facts of the case," and (iii) "[f]inally once qualified, the expert's testimony is still governed by the principles of relevancy." *Goode*, 341 N.C. at 527-529, 461 S.E.2d at 639-642.[4]

"This reference to *Daubert* touched off a debate as to whether North Carolina had adopted *Daubert* or had created a similar reliability-based system. In *Howerton v. Arai Helmet, Ltd.*, 358 N.C. 440, 597 S.E.2d 674 (2004), the North Carolina Supreme Court resolved the issue." 1-10 *North Carolina Evidentiary Foundations* § 10-3B2 (2012). The *Howerton* court explicitly rejected the notion that this stated had adopted the "gatekeeping" standard under *Daubert* to determine the admissibility of expert testimony under North Carolina Rule 702, saying, "North Carolina is not, nor has it ever been a Daubert jurisdiction.'" *Id.* at 469, 597 S.E.2d at 693.

The *Howerton* court went to great lengths to explain the differences between the *Daubert* standard for testing the reliability of scientific opinion testimony and the principles North Carolina had been following for years to accomplish the same task, noting that while "North Carolina cases share obvious similarities with the principles underlying *Daubert*, application of the North Carolina approach is decidedly less mechanistic and rigorous than the 'exacting standards of reliability' demanded by the federal approach.'" *Id.* at 464, 597 S.E.2d at 690 (quoting *Weisgram v. Marley Co.*, 528 U.S. 440, 455 (2000)). As most judges and lawyers agreed, "[t]he message of

---

[4] Regarding the "reliability" prong, the *Goode* court cited the four factors it had previously espoused in *State v. Pennington*, 327 N.C. 89, 393 S.E.2d 847 (1990) as the principles by which North Carolina courts should determine whether a scientific method is sufficiently reliable, explaining:

> Reliability of a scientific procedure is usually established by expert testimony, and the acceptance of experts within the field is one index, though not the exclusive index, of reliability. Thus, we do not adhere exclusively to the formula, enunciated in *Frye v. United States*, 54 App. D.C. 46, 293 F. 1013 (D.C. Cir. 1923), and followed in many jurisdictions, that the method of proof "must be sufficiently established to have gained general acceptance in the particular field in which it belongs." *Id.* at 1014. Believing that the inquiry underlying the *Frye* formula is one of the reliability of the scientific method rather than its popularity within a scientific community, we have focused on the following indices of reliability: the expert's use of established techniques, the expert's professional background in the field, the use of visual aids before the jury so that the jury is not asked "to sacrifice its independence by accepting [the] scientific hypotheses on faith," and independent research conducted by the expert.

Goode, 341 at 528, 461 S.E.2d at 640 (quoting *State v. Pennington*, 327 N.C. 89, 393 S.E.2d 847 (1990) (internal citations omitted)).

Howerton [was] that trial courts are charged with ensuring the reliability of expert testimony. However, they are to do it less mechanistically and without the relentless rigor and exacting standards of the federal/*Daubert* approach. Colloquially, one might say North Carolina has a 'kinder and simpler' system." 1-10 *North Carolina Evidentiary Foundations* § 10-3B2.

This rejection of *Daubert* "came as a surprise to some observers and scholars because the standards for scientific and expert evidence stated in *Daubert* are not very different, if they are different at all, from the standards adopted by the North Carolina Supreme Court in *State v. Goode* and *State v. Pennington* . . . The explanation is that the North Carolina Supreme Court was not so much rejecting the standards announced in *Daubert* as it was rejecting the practices that have grown up in federal and some state courts under *Daubert* in which trial judges have undertaken to decide more and more about the adequacy of scientific and expert evidence." 1-702 *North Carolina Evidence Courtroom Manual* (2012).

B. *Crocker, Day,* and the most recent N.C. rules governing expert testimony in N.C. medical malpractice cases

The three-pronged test for the admissibility of expert opinions from *Goode*, and later affirmed in *Howerton*, does not at first blush apply neatly to medical testimony in malpractice cases. As stated in Section II(B), *supra*, there are numerous evidentiary requirements particular to medical malpractice expert opinions, and it can be difficult to figure out where in the *Goode* triumvirate they fit. There are, however, a number of recent medical malpractice opinions citing the *Goode/Howerton* standards.

In particular, the Appendix to this manuscript contains copies of case summaries this author prepared[5] for two recent cases which, when read together, illustrate the current landscape of the various rules governing expert testimony in North Carolina medical malpractice cases: *Crocker v. Roethling*, ___ N.C. App.___, 719 S.E.2d 83, 2011 N.C. App. LEXIS 2338 (2011); *Day v. Brant*, ___ N.C. App.___, 721 S.E.2d 238; 2011 N.C. App. LEXIS 61. These cases cover most, if not all, of the major evidentiary issues surrounding medical expert testimony in North Carolina, including but not limited to: expert qualification as a licensed physician; level of familiarity with the "same or similar community" standard of care; methods for demonstrating familiarity with applicable standard of care; admissibility of national standard of care; causation issues regarding decreased chance of survival opinions; reliability of causation opinions with respect to speculation versus sufficient basis that is helpful to the jury; causation opinions based on personal experience treating other patients and monitoring outcomes.

The *Crocker* case mentioned above has a long appellate history, and the companion case of *Crocker v. Roethling*, 363 N.C. 140, 675 S.E.2d 625 (2009) (aka "*Crocker II*") is also an decision when it comes to understanding the current landscape of medical malpractice law in North Carolina. It is one of the most recent statements from the North Carolina Supreme Court on the

[5] The summaries were prepared as part of the 2010-2011 Medical Malpractice Case Law update presented at the NCAJ Convention.

issue of expert opinion relevancy, the third element under the *Goode/Howerton* standard. The Plaintiff-mother in *Crocker* underwent an induction of labor at Wayne Memorial Hospital in Goldsboro (Wayne County), and delivery became complicated by should dystocia. The defendant obstetrician attempted several techniques to relieve the shoulder dystocia, but never attempted the Zavanelli maneuver where the fetus is pushed back into the uterus and the baby is delivered by c-section. The plaintiff's daughter died from injuries sustained during birth. The plaintiffs filed suit against defendants alleging a failure to perform the Zavanelli maneuver, and designated Dr. John Elliot, an Ob/Gyn specializing in high risk obstetrics, as their sole expert. After taking Dr. Elliot's deposition, defendants moved for and were granted summary judgment on the basis that Dr. Elliot was not qualified to opine on the standard of care in Goldsboro. After a long appeals process, the N.C. Supreme Court took the case on discretionary review.

The Court cited the three-pronged test from *Goode* and stated that "applying *Goode* in the context of N.C.G.S. § 90-21.12, we note that North Carolina law has established a 'workable' and 'flexible system for assessing' the admissibility of expert testimony under Rule 702." *Crocker*, 363 N.C. at 141, 675 S.E.2d at 629 (quoting *Goode*, 341 N.C. at 469, 597 S.E.2d at 692)). Of note, the Court went to explain:

> Here, the first two steps of the *Goode* analysis are not at issue; there is no controversial or novel "proffered scientific or technical method of proof" which defendants challenge as unreliable, nor have they questioned Dr. Elliott's qualifications as a medical expert. Instead, defendants in essence dispute the relevance of Dr. Elliott's testimony, arguing that his testimony was not admissible because it did not address the relevant standard of care: that of Goldsboro or similar communities.

Id. (internal citations omitted). This statement has great potential importance as we look ahead and predict the possible effects that the New Rule 702(a) will have on medical malpractice opinion testimony. One could interpret this language from *Crocker* as a declaration by the North Carolina Supreme Court that when it comes to the admissibility of standard of care opinions (e.g. an opinion that the defendant breached the standard of care in not performing the medical maneuver/procedure/test/etc. required under the circumstances) then the "reliability" prong of *Goode* and *Howerton* will not be "at issue." In other words, opinions from qualified medical experts that the standard of care required a certain type of action, and that the defendant failed to take such action, will not be considered a "controversial or novel 'proffered scientific or technical method of proof'" on the issues of duty and breach in the medical malpractice arena.[6]

On the issue of the "relevancy" prong and Dr. Elliot's familiarity with the same or similar community standard of care, in a divided opinion the Court determined that the issue was too close to call on the record presented. Due to this "close call" and the conflicting deposition/affidavit testimony from Dr. Elliot, the Court voted to remand the case to the trial court to conduct an adversarial *voir dire* examination of Dr. Elliot on his familiarity with the

[6] See Sec. IV(C), *infra*, regarding standard of care opinions after the new Rule 702(a).

applicable standard of care. *Id.* (Martin, J. concur). This ruling also holds potential importance under the new Rule 702(a), as this type of "close call" hearing may very well take the place of the *Daubert* hearings seen in federal court and jurisdictions adopting the federal standard. This may be yet another sign that the change to medical malpractice cases under the new Rule 702(a) may not be as great as in other practice areas, given that a *voir dire* hearing to determine admissibility of expert opinion testimony is already required in "close call" cases in North Carolina after *Crocker II*.

C. *Daubert* and its progeny

"The plain language of the revised Rule 702(a), standing alone, does not appear to significantly change the reliability requirement that is the touchstone of *Howerton*," however, "the extensive caselaw that has developed in light of *Daubert* and the subsequent modification of F.R.E. 702 suggests different factors that should be considered with respect to the admissibility of expert testimony." 1-702 *North Carolina Evidence Courtroom Manual*. Thus, in order to appreciate the changes that may follow the new Rule 702(a) in North Carolina, it is necessary to review *Daubert* and its progeny.

i. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S.Ct. 2786 (1993)

In *Daubert*, the plaintiffs alleged that the drug Benedictin had caused them to be born with limb reduction birth defects. The plaintiffs tendered highly qualified experts on the issue, however the lower court granted summary judgment to the defense finding that the experts' causation opinions were not based upon principles that had gained wide enough acceptance in the scientific community to pass muster under the *Frye* test. The U.S. Supreme Court granted cert to consider the proper standard for the admission of expert testimony.

The Court rejected the *Frye* test and held that it had been "superseded by the adoption of the Federal Rules of Evidence," which calls for a "a liberal" standard of admissibility under FRE 702 that does not require "general acceptance" as a baseline prerequisite to admissibility of scientific opinion testimony. *Daubert*, 509 U.S. at 587. In determining the extent to which FRE 702 regulates "the subjects and theories about which an expert may testify," the Court pointed out that the plain language of the Rule requires that the subject of an expert opinion must "scientific . . . knowledge." *Id.* at 589. The Court reasoned that the word "scientific" connotes "a grounding in the methods and procedures of science," whereas the term "knowledge" implies concepts with an established factual basis. Thus, the Court concluded that the "[p]roposed testimony must be supported by appropriate validation," and that FRE 702 therefore sets out a standard of "evidentiary reliability" and relevancy for scientific opinion testimony. *Id.* at 589-90.

A determination of reliability and relevancy "entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and whether that reasoning or methodology properly can be applied to the facts in issue." *Id.* The Court went on to articulate four factors (called "general observations" by Justice Blackmon, writing for the majority)

to aid lower courts in making this determination: (i) whether the "theory or technique . . . can be (and has been) tested;" (ii) whether "it has been subjected to peer review and publication;" (iii) "the known or potential rate of error;" and (iv) "general acceptance" within the scientific community. In the end, the Court recognized that its opinion created a "gatekeeping role for the judge" to review and exclude any invalid science from the courtroom even if the practical effect is that "on occasion [it] will prevent the jury from learning of authentic insights and innovations." *Id.* at 596.

ii. *General Electric Co. v. Joiner*, 522 U.S. 136, 118 S.Ct. 512 (1997)

In *Joiner*, the plaintiff-electrician alleged that his exposure to PCB's and other chemicals accelerated his lung cancer. The defendants first raised a *Daubert* objection, and subsequently moved for summary judgment on the grounds that not only was there no evidence that the plaintiff suffered significant exposure to the chemicals at issue, but that the plaintiff had failed to offer any there was no admissible scientific evidence that PCBs actually promoted plaintiff's cancer. Despite the fact that the plaintiff's experts cited numerous studies regarding the link between PCB's and lung cancer, the trial court reviewed the studies and determined them to be too subjective, speculative, and therefore unreliable.

The Supreme Court initially granted cert to determine the appropriate standard of review for a trial court's decision to exclude expert testimony under *Daubert*, and ruled that under the "gatekeeper" role of Rule 702 is simply an evidentiary ruling of the trial court and therefore an appellate court must review the same under an abuse of discretion standard, even if the ruling is "outcome determinative" in the case. *Joiner*, 522 at 146. However, rather than remand the case for consideration under the appropriate standard of review, the Court proceeded to conduct its own review of the plaintiff's proffered scientific opinion testimony on causation.

Despite the prior statements in *Daubert* that the focus on a Rule 702 review "must be solely on the principles and methodology, not the conclusions they generate," the *Joiner* court held that "conclusions and methodology are not entirely distinct from one another," and "a court may conclude that there is simply too great an analytical gap between the data and the opinion offered." *Id.* In sum, "nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit*[7] of the expert."

The Court then analyzed the studies cited by plaintiff's experts and compared them against the causation conclusions drawn based upon the studies. The experts cited peer reviewed animal studies linking certain types of cancer development to the chemicals at issue. Rather than stop there and find this an acceptable methodology under *Daubert* (i.e. find any problems with this method go to weight rather than admissibility), the Court went further and conducted their own assessment of the credibility of the expert's conclusions. The Court reasoned that the studies were not closely enough related to the plaintiff's specific type of human physiology and level of chemical exposure. The Court was also critical of the fact that none of studies cited by plaintiff's experts

[7] *Ipse dixit*: Definition: [*Latin, He himself said it.*] An unsupported statement that rests solely on the authority of the individual who makes it. (legal-dictionary.thefreedictionary.com/ipse+dixit)

were willing to suggest a link between increases in lung cancer and PCB exposure among human workers they examined. In short, despite the fact that the experts employed a method that cited and relied on peer reviewed studies, their conclusions drawn from these studies required too great of an analytical leap in the Court's eyes, and were therefore the expert's causation conclusions were unreliable. *Id.* at 142-146.

iii. *Kuhmo Tire Company, Ltd. V. Carmichael*, 526 U.S. 137, 119 S.Ct. 1167 (1999)

In *Kuhmo Tire*, the Court ruled that the *Daubert* gatekeeping standards also applied to nonscientific types of expert testimony (i.e. experts who rely on technical skill or experience-based observation to draw their conclusions). The plaintiffs alleged they were injured by a defective tire blowout, and tendered a tire expert highly qualified based on his years in the industry doing root cause analyses on tire blowouts. The Supreme Court agreed that the gatekeeping role should apply to all types of expert testimony under Rule 702, and analyzed to what extent the *Daubert* factors should be considered in any given case.

The Court noted that "there are many different kinds of experts, and many different kinds of expertise," and therefore the *Daubert* factors may or may not apply "depending on the nature of the issue, the expert's particular expertise, and the subject of his testimony." *Kuhmo Tire*, 526 U.S. at 150. The Court pointed out that the list from *Daubert* is not exhaustive, and those four factors may not make sense in certain cases. Thus, "the trial judge must have considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable." *Id.*

D. The current FRE 702 and Advisory Committee Notes

The Federal Rules of Evidence, including FRE 702, underwent a "stylistic" amendment in 2011 to make them more consistent and readable. However, FRE 702 has not undergone any substantive changes since it was amended in 2000 to bring the rule in line with *Daubert* and the subsequent body of case law that has grown around it. The current FRE 702 is identical in substance to the new Rule 702(a) in North Carolina, and reads as follows:

> ***Rule 702.*** *A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:*
>
> ***(a)*** *the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;*
> ***(b)*** *the testimony is based on sufficient facts or data;*
> ***(c)*** *the testimony is the product of reliable principles and methods; and*
> ***(d)*** *the expert has reliably applied the principles and methods to the facts of the case.*

The Advisory Committee Notes to FRE 702 provide indispensable guidance in understanding the proper scope and application of the *Daubert* standard, the relevant factors

beyond the "*Daubert* four" that are meant to aid in the court's determination of admissibility, as well as important issues that have emerged in the prevailing case law. It is highly recommended that every lawyer who plans on tendering or attacking a future expert opinion in North Carolina read the full Advisory Committee Note to the 2000 Amendment to FRE 702, as well as incorporate relevant sections into the motions and briefs that are sure to follow..

With respect to the factors that trial courts are to consider under FRE 702 gatekeeping role, the Advisory Committee Notes makes clear that the four factors listed by Justice Blackmon in *Daubert* are neither exhaustive nor controlling in every case. As the Notes explain:

> *Daubert* set forth a **non-exclusive** checklist for trial courts to use in assessing the reliability of scientific expert testimony . . . No attempt has been made to "codify" these specific factors. *Daubert* itself emphasized that the factors were **neither exclusive nor dispositive**. Other cases have recognized that not all of the specific *Daubert* factors can apply to every type of expert testimony . . . The standards set forth in the amendment are broad enough to require consideration of any or all of the specific *Daubert* factors **where appropriate**. Courts both before and after *Daubert* have found other factors relevant in determining whether expert testimony is sufficiently reliable to be considered by the trier of fact. These factors include:
>
> (1) Whether experts are "proposing to testify about matters growing naturally and directly out of research they have conducted independent of the litigation, or whether they have developed their opinions expressly for purposes of testifying." *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 43 F.3d 1311, 1317 (9th Cir. 1995).
>
> (2) Whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion. *See General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) (noting that in some cases a trial court "may conclude that there is simply too great an analytical gap between the data and the opinion proffered").
>
> (3) Whether the expert has adequately accounted for obvious alternative explanations.*See Claar v. Burlington N.R.R.*, 29 F.3d 499 (9th Cir. 1994) (testimony excluded where the expert failed to consider other obvious causes for the plaintiff's condition). *Compare Ambrosini v. Labarraque*, 101 F.3d 129 (D.C.Cir. 1996) (the possibility of some uneliminated causes presents a question of weight, so long as the most obvious causes have been considered and reasonably ruled out by the expert).
>
> (4) Whether the expert "is being as careful as he would be in his regular professional work outside his paid litigation consulting." *Sheehan v. Daily Racing Form, Inc.*, 104 F.3d 940, 942 (7th Cir. 1997). *See Kumho Tire Co. v. Carmichael*, 119 S.Ct. 1167, 1176 (1999) (*Daubert* requires the trial court to assure itself that the expert "employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field").
>
> (5) Whether the field of expertise claimed by the expert is known to reach reliable results for the type of opinion the expert would give. *See Kumho Tire Co. v. Carmichael*, 119 S.Ct. 1167, 1175 (1999) (*Daubert's* general acceptance factor does not "help show that an expert's testimony is reliable where the discipline itself lacks reliability, as, for example, do theories grounded in any so-called generally accepted principles of astrology or necromancy."); *Moore v. Ashland Chemical, Inc.*, 151 F.3d 269 (5th Cir. 1998) (en banc) (clinical doctor was properly precluded from

testifying to the toxicological cause of the plaintiff's respiratory problem, where the opinion was not sufficiently grounded in scientific methodology); *Sterling v. Velsicol Chem. Corp.*, 855 F.2d 1188 (6th Cir. 1988) (rejecting testimony based on "clinical ecology" as unfounded and unreliable).

All of these factors remain relevant to the determination of the reliability of expert testimony under the Rule as amended. **Other factors may also be relevant** . . . **Yet no single factor is necessarily dispositive of the reliability of a particular expert's testimony**.

Advisory Committee Note to 2000 Amendment to Rule 702 (emphasis added) (internal citations omitted).

IV. Predicting the Effects on Medical Malpractice in N.C.

A. N.C. federal court cases applying the *Daubert* standard to medical testimony

Given that "trial courts will undoubtedly now look to federal caselaw for guidance with respect to the acceptability of scientific methods, at least until North Carolina caselaw is developed in this area," 1-702 *North Carolina Evidence Courtroom Manual*, it is helpful to examine the relevant cases from the 4th Circuit and the North Carolina federal district courts on the issues of medical opinion testimony under FRE 702 and the *Daubert* standard. What follows is a collection of such ***published*** cases, along with helpful quotes relevant to medical malpractice and/or medical expert opinion issues[8].

***Doe v. Ortho-Clinical Diagnostics, Inc.*, 440 F. Supp. 2d 465, 2006 U.S. Dist. LEXIS 45876 (M.D.N.C. 2006)**

OVERVIEW: In parents' suit alleging that a component in a pharmaceutical company's biologic product caused their child's autism, testimony from the parents' causation expert was excluded under Fed. R. Evid. 702. The expert's literature review, which formed the basis of his opinion, was not derived by the scientific method or relevant to the task at hand.

***Smith v. Wyeth-Ayerst Labs. Co.*, 278 F. Supp. 2d 684, 2003 U.S. Dist. LEXIS 19972 (W.D.N.C. 2003)**

Regarding reliability causation opinions / must consider and explain away other possible causes: "An expert must account for 'how and why' he or she reached the challenged opinion. *General Electric Co. v. Joiner*, 522 U.S. 136, 144, 139 L. Ed. 2d 508, 118 S. Ct. 512 (1997). Generally, before an expert opinion on causation is allowed, the expert must be able to 'take serious account of other potential causes,' and offer an explanation as to why a proffered alternative was not the sole cause. *Westberry*, 178 F.3d at 265. However, an opinion is not deemed unreliable simply because all other potential causes cannot be excluded. *Id.*; *Cooper v. Smith and Nephew, Inc.*, 259 F.3d 194, 202 (4th Cir.2001). Instead, the alternative causes suggested by a defendant normally affect the weight that the jury

[8] Note: rather than omit internal citations in the following case quotes they have been left in to assist the reader in identifying other cases of potential interest that were relied upon by the quoted court.

should give the expert's testimony and not the admissibility of that testimony. *Id.*" *Smith*, 278 F. Supp. 2d at 691.

Regarding the use of differential diagnosis / acceptable method / not necessary to examine patient personally: "Further, Dr. Rich's reasoning and methodology is generally accepted in the medical field. In *Westberry*, the Fourth Circuit Court of Appeals held that "a reliable differential diagnosis provides a valid foundation for an expert opinion." *Westberry*, 178 F.3d at 263; *Benedi*, 66 F.3d at 1384 ("We will not declare such methodologies invalid and unreliable in light of the medical community's daily use of the same methodologies in diagnosing patients.") A differential diagnosis, like other expert testimony, is deemed reliable when supported by scientific, technical, or other specialized knowledge, or inferences derived from scientific or other valid methods. *Cooper*, 259 F.3d at 200 (citing *Oglesby v. General Motors Corp.*, 190 F.3d at 250). In addition, it was not necessary for Dr. Rich to have examined Plaintiff personally in order for him to render a reliable differential diagnosis. *Cooper*, 259 F.3d at 203. In sum, differential diagnosis methodology "has widespread acceptance in the medical community, has been subject to peer review, and does not frequently lead to incorrect results." *Westberry*, 178 F.3d at 262. Despite the disagreement between the parties' experts on the latency issue, there is no indication that Dr. Rich's testimony is not reliable or trustworthy. In fact, the number of Plaintiff's treating physicians (four) that arrived at the same conclusion, and rendered the identical diagnosis, supports Plaintiff's position." *Id.* at 696-97.

***Wright v. United States*, 280 F. Supp. 2d 472, 2003 U.S. Dist. LEXIS 15325 (M.D.N.C. 2003)**

Regarding standard of care opinion / area of expertise and qualification / assist the jury and relevance: "Dr. Kaufman's admission that he is not competent to testify regarding clinical matters, together with his acknowledgment that the padding of patients demands clinical expertise, makes his testimony on the specific standard of care for padding a patient inadmissible as beyond his field of expertise. *See Kline v. Lorillard, Inc.*, 878 F.2d 791, 799 (4th Cir. 1989) (expert testimony is properly excluded if the purported expert lacks "satisfactory knowledge, skill, experience, training [or] education on the issue for which the opinion is proffered"); *Hartke v. McKelway*, 526 F. Supp. 97, 100-101 (D.D.C. 1981) (family practitioner unqualified to establish the standard of care for sterilization surgery, where the practitioner had never performed the operation, had no training in the procedure, and the "major reason for her conclusion that there was negligence was that the result was unfavorable")." *Wright*, 280 F. Supp. 2d at 480.

Regarding standard of care opinion / relevancy and assist the jury: "Even if Dr. Kaufman qualified as an expert in the clinical aspects of positioning and padding of patients for a prostatectomy, moreover, his proffered testimony on the standard of care does not assist the finder of fact. Expert testimony is admissible under Federal Rule of Evidence 702 if it rests on a reliable foundation and will help the trier of fact understand or resolve a fact at issue. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141-42, 119 S. Ct. 1167, 1171, 143 L. Ed. 2d 238 (1999); *Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 260 (4th Cir. 1999). The subject matter of the testimony is proper for expert testimony if it "will recount or employ"

specialized knowledge.Kopf v. Skyrm, 993 F.2d 374, 377 (4th Cir. 1993). The facts of each case, however, determine whether expert testimony assists the trier of fact in that case. Id. at 379. By Dr. Kaufman's own admission, his clinical limitations render him incapable of explaining how a nurse, anesthesiologist, or anyone else padding a patient could ascertain how much padding would be sufficient for a person of Mr. Wright's body type. Accordingly, his testimony on this subject does not help the trier of fact understand the standard of care or resolve the question of its alleged violation in this case. See Fed. R. Evid. 702; *Kline*, 878 F.2d at 799." *Wright*, 280 F. Supp. 2d at 480.

***Dunn v. Sandoz Pharms. Corp.*, 275 F. Supp. 2d 672, 2003 U.S. Dist. LEXIS 13742 (M.D.N.C. 2003)**

OVERVIEW: A patient's action against a pharmaceutical company seeking damages for her stroke was dismissed where, following exclusion of her medical causation expert's testimony, the patient was unable to establish general causation.

***Cooper v. Smith & Nephew, Inc.*, 259 F.3d 194, 2001 U.S. App. LEXIS 15408 (4th Cir. 2001)**

Regarding use differential diagnosis / failure to properly consider and explain other possible casues: "We disagree. As the Supreme Court has recognized, HN8"conclusions and methodology are not entirely distinct from one another." *Joiner*, 522 U.S. at 146. A medical expert's opinion based upon differential diagnosis normally should not be excluded because the expert has failed to rule out every possible alternative cause of a plaintiff's illness. *See Westberry*, 178 F.3d at 265 (citations omitted). In such cases, the alternative causes suggested by a defendant normally affect the weight that the jury should give the expert's testimony and not the admissibility of that testimony. *See id.* at 265 (citations omitted). However, a "differential diagnosis that fails to take serious account of other potential causes may be so lacking that it cannot provide a reliable basis for an opinion on causation." *Id.* at 265 (citations omitted). Thus, if an expert utterly fails to consider alternative causes or fails to offer an explanation for why the proffered alternative cause was not the sole cause, a district court is justified in excluding the expert's testimony. See id. at 265-66 (citations omitted); *see also In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 758-59 n.27 (3d Cir. 1994)." *Cooper*, 259 F.3d at 202.

***True v. Pleasant Care, Inc.*, 1999 U.S. Dist. LEXIS 21246 (E.D.N.C. 2000)**

Regarding causation opinion based recent research and novel theories: "The medical experts in this case are unanimous in stating that diagnosing CAD requires a multifactoral analysis, and therefore no single factor can be marked as the cause of the disease. (Dr. Frazier Dep. at 52-54; Dr. Jobe Dep. at 15-16; Dr. Maradiaga Dep. at 24, 87-89). The experts noted that recent research indicates a possible link between stress and CAD (Dr. Maradiaga Dep. at 103-4, 110-11). This evidence passes the threshold for admissibility of scientific evidence under D*aubert v. Merrell Dow*, 509 U.S. 579, 125 L. Ed. 2d 469, 113 S. Ct. 2786 (1993), but the theory appears embryonic. 2 Nevertheless, Mr. True's internal medicine physician, Dr. Maradiaga, believed that the stress/ CAD link had been accepted and noted that stress "increased the risk of CAD" and contributed to hypertension, which is a "major risk factor" of CAD (Dr. M at 103-104, 110-111)." *True*, 1999 U.S. Dist. LEXIS at *11.

***Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 1999 U.S. App. LEXIS 9729 (4th Cir. 1999)**

Regarding use of differential diagnosis / acceptable method: "Instead, Dr. Isenhower merely relied on a differential diagnosis--supported in part by the temporal relationship between Westberry's exposure to talc and the problems he experienced with his sinuses--in reaching the

conclusion that Westberry's sinus problems were caused by his exposure to talc from GGAB's gaskets. GGAB maintains that neither a differential diagnosis nor a temporal relationship between exposure and onset or worsening of symptoms is sufficient to establish the reliability of Dr. Isenhower's opinion. We disagree.

Differential diagnosis, or differential etiology, is a standard scientific technique of identifying the cause of a medical problem by eliminating the likely causes until the most probable one is isolated. *See Baker v. Dalkon Shield Claimants Trust*, 156 F.3d 248, 252-53 (1st Cir. 1998). A reliable differential diagnosis typically, though not invariably, is performed after "physical examinations, the taking of medical histories, and the review of clinical tests, including laboratory tests," and generally is accomplished by determining the possible causes for the patient's symptoms and then eliminating each of these potential causes until reaching one that cannot be ruled out or determining which of those that cannot be excluded is the most likely. *Kannankeril v. Terminix Int'l, Inc.*, 128 F.3d 802, 807 (3d Cir. 1997) (explaining that "differential diagnosis is defined for physicians as 'the determination of which of two or more diseases with similar symptoms is the one from which the patient is suffering, by a systematic comparison and contrasting of the clinical findings'" (quoting Stedman's Medical Dictionary [**11] 428 (25th ed. 1990)); *see McCullock v. H.B. Fuller Co.*, 61 F.3d 1038, 1044 (2d Cir. 1995) (describing differential etiology as an analysis "which requires listing possible causes, then eliminating all causes but one"); *Glaser v. Thompson Med. Co.*, 32 F.3d 969, 978 (6th Cir. 1994) (recognizing that differential diagnosis is "a standard diagnostic tool used by medical professionals to diagnose the most likely cause or causes of illness, injury and disease"). This technique "has widespread acceptance in the medical community, has been subject to peer review, and does not frequently lead to incorrect results." *Brown v. Southeastern Penn. Transp. Auth.* (In re Paoli R.R. Yard PCB Litig.), 35 F.3d 717, 758 (3d Cir. 1994); *see Heller v. Shaw Indus., Inc.*, 167 F.3d 146, 154-55 (3d Cir. 1999) (noting "that differential diagnosis consists of a testable hypothesis, has been peer reviewed, contains standards for controlling its operation, is generally accepted, and is used outside of the judicial context" (internal quotation marks omitted)).

We previously have upheld the admission of an expert opinion on causation based upon a differential diagnosis. *See Benedi v. McNeil-P.P.C., Inc.*, 66 F.3d 1378, 1383-85 (4th Cir. 1995) (holding that expert testimony by treating physician concerning cause of plaintiff's liver failure-acetaminophen combined with alcohol--was admissible despite the lack of epidemiological data). And, **the overwhelming majority of the courts of appeals that have addressed the issue have held that a medical opinion on causation based upon a reliable differential diagnosis is sufficiently valid to satisfy the first prong of the Rule 702 inquiry**. *Compare Heller*, 167 F.3d at 154, 156-57 (concluding that a proper differential diagnosis is adequate to support expert medical opinion on causation), *Kennedy v. Collagen Corp.*, 161 F.3d 1226, 1228-30 (9th Cir. 1998) (holding district court abused its discretion in excluding an expert opinion on causation based upon a reliable differential diagnosis), cert. denied, 67 U.S.L.W. 3570 (U.S. May 3, 1999) (No. 98-1424), *Baker*, 156 F.3d at 252-53 (determining that a differential diagnosis rendered expert opinion on causation sufficiently reliable for admission), *Zuchowicz v. United States*, 140 F.3d 381, 385-87 (2d Cir. 1998) (upholding determination that expert opinion was reliable in part based on differential diagnosis), and *Ambrosini v. Labarraque*, 322 U.S. App. D.C. 19, 101 F.3d 129, 140-41 (D.C. Cir. 1996) (holding that because expert opinion was based on differential diagnosis, district court abused its discretion in refusing to admit it), with *Moore v. Ashland Chem., Inc.*, 151 F.3d 269, 277-79 (5th Cir. 1998) (en banc) (concluding that district court did not abuse its discretion in rejecting expert opinion on causation without discussing why differential diagnosis was insufficient to support admission of opinion into evidence), cert. denied, 67 U.S.L.W. 3443 (U.S. Apr. 19, 1999) (No. 98-992). **Thus,**

we hold that a reliable differential diagnosis provides a valid foundation for an expert opinion. *Westberry*, 178 F.3d at 262-263 (emphasis added).

See Westbery also for a discussion of admissible causation opinions despite specific peer review literature enabling the expert to "rule in" the offending agent as actual cause of problem: *Id.* at 263-264

See Westbery also for a discussion of causation opinions based on the temporal relationship between exposure and onset of symptoms *Id.* at 265-66

See Westbery also for a discussion of admissible causation opinions despite expert's inability to definitively "rule out" other possible causes *Id.* at 266-67

***Benedi v. McNeil-P.P.C., Inc.*, 66 F.3d 1378, 1995 U.S. App. LEXIS 28061 (4th. Cir. 1995)**

Regarding treating physician's use of differential diagnosis / lack of epidemiological studies in support of causation: "McNeil contends that because Benedi's experts did not rely upon epidemiological data in formulating their opinions, their testimony is inadmissible under *Daubert*. However, we do not read *Daubert* as restricting expert testimony to opinions that are based solely upon epidemiological data . . . Under the *Daubert* standard, epidemiological studies are not necessarily required to prove causation, as long as the methodology employed by the expert in reaching his or her conclusion is sound. Benedi's treating physicians based their conclusions on the microscopic appearance of his liver, the Tylenol found in his blood upon his admission to the hospital, the history of several days of Tylenol use after regular alcohol consumption, the liver enzyme blood level, and the lack of evidence of a viral or any other cause of the liver failure. Benedi's other experts relied upon a similar methodology: history, examination, lab and pathology data, and study of the peer-reviewed literature. We conclude that the district court did not abuse its discretion when it determined that the methodology employed by Benedi's experts is reliable under *Daubert*. We will not declare such methodologies invalid and unreliable in light of the medical community's daily use of the same methodologies in diagnosing patients. *In City of Greenville v. W.R. Grace & Co.*, 827 F.2d 975 (4th Cir. 1987)." *Benedi*, 66 F.3d at 1384.

B. Expert qualification

When considering how the new Rule 702(a) may affect expert qualification requirements in North Carolina it is imperative to remember that the admissibility requirements Rule 702(b)[9] will **continue to apply** to any expert opinion regarding duty or breach of the statutory standard of care in G.S. § 90-21.12. In general, however, assuming the new Rule 702(a) ushers in a shift toward the *Daubert* standard, then the other types of medical malpractice opinions (e.g. causation, damages, duty and breach of the common law duties) will be subject to stricter qualification requirements. That being said, experience alone may still be considered a valid basis for qualification under the new Rule 702(a) for rendering opinions under the proper circumstances. As the Advisory Committee Notes explain best:

[9] See Sec. II(B), *supra*.

> Nothing in this amendment is intended to suggest that experience alone—or experience in conjunction with other knowledge, skill, training or education—may not provide a sufficient foundation for expert testimony. To the contrary, the text of Rule 702 expressly contemplates that an expert may be qualified on the basis of experience. In certain fields, experience is the predominant, if not sole, basis for a great deal of reliable expert testimony. *See, e.g., United States v. Jones*, 107 F.3d 1147 (6th Cir. 1997) (no abuse of discretion in admitting the testimony of a handwriting examiner who had years of practical experience and extensive training, and who explained his methodology in detail); *Tassin v. Sears Roebuck*, 946 F.Supp. 1241, 1248 (M.D.La. 1996) (design engineer's testimony can be admissible when the expert's opinions "are based on facts, a reasonable investigation, and traditional technical/mechanical expertise, and he provides a reasonable link between the information and procedures he uses and the conclusions he reaches"). *See also Kumho Tire Co. v. Carmichael*, 119 S.Ct. 1167, 1178 (1999) (stating that "no one denies that an expert might draw a conclusion from a set of observations based on extensive and specialized experience.").
>
> **If the witness is relying solely or primarily on experience, then the witness must explain how that experience leads to the conclusion reached, why that experience is a sufficient basis for the opinion, and how that experience is reliably applied to the facts. The trial court's gatekeeping function requires more than simply "taking the expert's word for it**." *See Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 43 F.3d 1311, 1319 (9th Cir. 1995) ("We've been presented with only the experts' qualifications, their conclusions and their assurances of reliability. Under *Daubert*, that's not enough."). The more subjective and controversial the expert's inquiry, the more likely the testimony should be excluded as unreliable. *See O'Conner v. Commonwealth Edison Co.*, 13 F.3d 1090 (7th Cir. 1994) (expert testimony based on a completely subjective methodology held properly excluded).*See also Kumho Tire Co. v. Carmichael*, 119 S.Ct. 1167, 1176 (1999) ("[I]t will at times be useful to ask even of a witness whose expertise is based purely on experience, say, a perfume tester able to distinguish among 140 odors at a sniff, whether his preparation is of a kind that others in the field would recognize as acceptable.").

Advisory Committee Note to 2000 Amendment to Rule 702 (emphasis added). The bottom line is that an expert will need more than proper credentials, whether grounded in "skill, experience, training or education," to qualify under the new Rule 702. A proposed expert must also have sufficient "knowledge" that is grounded in accepted facts and standards within his/her relevant industry.

Plaintiff's lawyers must be aware of the defense tactic of "framing" under this new standard. As Michigan medical malpractice defense attorneys Ellen Keefe-Garner and Beth R. Wickwire explain:

> In addition, it is sometimes possible to get an expert to acknowledge that none of his or her own research, presentations, or publications are directly applicable to the narrow medical issues presented in the case. Further, an expert witness's deposition presents another opportunity to pin the expert down with regard to the references for any scientific, medical, or technical articles, publications, or other literature that the expert is using to support his or her opinions. **Obviously, it is to the advantage of a party bringing a Daubert challenge to frame the medical issues in a case as narrowly as possible, thus allowing that party to distinguish the opinions offered in the subject case from the examples set forth in the cited medical literature**.

"Gatekeepers in Michigan Courts: *Daubert* Requires Trial Judges to Close the Gate on Junk Science," *Michigan Bar Journal* (Feb. 2009) (emphasis added).[10] This tactic is not just theoretical, but has already made its way into the appellate opinions of sister states. *See Dawson v. Leder*, 294 Ga.App. 717, 669 S.E.2d 720 (2008) (where the area of expertise narrowly defined at post-operative airway management, expert opinion held inadmissible under *Daubert* standard where the doctor had been practicing surgeon for years, taught residents, was co-director of hospital ICU, but had only performed post-operative airway management procedures on a few occasions in the past.)

C. Standard of care opinions

There is a dearth of case law applying *Daubert* to the admissibility of standard of care opinions in the medical malpractice context. There are likely a number of reasons to explain this absence. For starters, most states (including North Carolina) require the standard of care to established by evidence of customary practice in the same or similar medical community. The localized "same or similar communities" standard means that there often is little to no "demanding methodologically sound survey evidence of [the standard's] adoption" in the local community, "let alone rigorous proof of efficacy." Shuman, "Much Ado about Little: The Effect of *Daubert*, *Joiner*, and *Kumho Tire* on Claims of Medical Expertise," *Expertise in Law, Medicine, and Health Care*, 26 J. Health Pol., Pol'y & L. 267, 278 (2001).[11]

There are, however, a few reported opinions of note apply the *Daubert* rules to standard of care opinions in medical malpractice cases:

> The Supreme Court of Montana chose to apply *Daubert* only to novel scientific evidence and therefore held that it does not apply to the qualification of a physician as an expert on the information that a physician should provide to a patient to obtain informed consent (*Gilkey v. Schweitzer*, 983 P.2d 869 [Mont. 1999]). The Supreme Court of Washington rejected *Daubert's* application, holding that a conventional analysis under the rules of evidence was more appropriate because the expert's medical opinion was based on practical experience and

[10] The full article is available for free online here: http://www.michbar.org/journal/pdf/pdf4article1471.pdf
[11] The full article is available for free online here: http://www.ahrq.gov/clinic/jhppl/shuman2.htm

> acquired knowledge, not a novel scientific procedure (*Reese v. Stroh*, 907 P.2d 282, 286 [Wash. 1995]). In two other standard-of-care decisions citing *Daubert*, appellate courts concluded that the trial court had not abused its discretion in the expert testimony it admitted on the standard of care: *Carroll v. Morgan* (17 F.3d 787 [5th Cir. 1994] [trial court did not abuse discretion under *Daubert* in refusing to exclude defense expert in medical malpractice case who "refused to recognize any medical textbooks or journal articles as authoritative on endocarditis"]) and *Mitchell v. United States* (141 F.3d 8 [1st Cir. 1998] [trial court did not abuse discretion under Daubert in admitting expert testimony in medical malpractice case by qualified experts on the standard of care just because witness was not specialist in field in which he gave opinion]).

Id. (under "Civil Litigation" section).

One of the factors considered by trial courts following the *Daubert* standard is whether the expert "employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field". *Kumho Tire Co. v. Carmichael*, 119 S.Ct. 1167, 1176 (1999). In terms of rendering standard of care opinions, this factor requires an expert to employ the same kind of decision-making process and treatment plan justification that would be employed if he/she were caring the for the patient. This underscores the importance of providing medical records to experts sequentially (i.e. in chronological order with no outcome information available until the end of the review). You must instruct the expert to do everything possible to conduct the review of the records in "real time," placing himself/herself in the shoes of the defendant as the care progresses in time. If an expert renders an opinion on standard of care when he or she knows the outcome information before conducting a review of the defendant's care then an argument can be made that under *Daubert* and *Kumho Tire* the opinion is inadmissible.

D. Causation opinions

Once again, there is a relative lack of case law applying *Daubert* standards to causation opinions in medical malpractice cases. However, there is a very large body of case law applying *Daubert* standards to medical causation opinions in the products liability and toxic torts contexts. For a thorough discussion of this law see the following: *See* Section IV(A), *supra*, for a collection of relevant North Carolina federal cases applying *Daubert* rules to medical causation opinions; *See also* Appendix to this manuscript, Sec. B, listing a wealth of case annotations on causation in various medical context.

In North Carolina "evidence of causation in a medical negligence case 'must be probable, not merely a remote possibility.'" *White v. Hunsinger*, 88 N.C. App. 382, 387, 363 S.E.2d 203, 206 (1988). If expert causation testimony "is based merely upon speculation and conjecture . . . it is no different than a layman's opinion, and as such, is not sufficiently reliable to be considered competent evidence on issues of medical causation." *Azar v. Presbyterian Hosp.*, 191 N.C. App. 367, 371, 663 S.E.2d 450, 453 (2008). These general rules will remain in effect despite the passage of

the new Rule 702(a). However, the new rule will establish a stricter set of requirements to show an expert's causation testimony meets the "probability" and "sufficiently reliable" benchmarks.

"Depending on the type of case and the legal standard, a medical expert may testify in regard to specific causation, general causation, or both. General causation refers to whether the plaintiff's injury could have been caused by the defendant, or a product produced by the defendant, while specific causation is established only when the defendant's action or product actually caused the harm. An opinion by a testifying physician may be offered in support of both kinds of causation." Henifin, et. al., *Reference Guide on Medical Testimony*, 691 (3rd Ed. 2011). It appears far more difficult to pass *Daubert* scrutiny when offering specific causation testimony[12]. *See* Section IV(A), *supra*, for a collection of relevant North Carolina federal cases applying *Daubert* rules to specific causation in medical cases; *See also* Appendix to this manuscript, Sec. B, listing a wealth of case annotations on specific and general causation admissibility standards.

E. Damages opinions

All damages opinions will be subject to the new Rule 702(a) requirements in medical malpractice cases. This includes life expectancy predictions, life care plan requirements and cost projections, economic valuations of life care plans or lost wages, etc. Once again, damages experts will be expected to cite to peer-reviewed literature (where appropriate) to support their opinions and/or valuations, ***and*** must be able to demonstrate that they reliably applied this methodology in reaching their specific conclusions regarding the plaintiff. *See* the Appendix to this manuscript for a collection of case annotations applying *Daubert* standards to damages opinions in the medical context.

F. Differential Diagnosis

The 4th Circuit has already determined that a medical causation opinion based on the use of differential diagnosis is an acceptable methodology under *Daubert*. *See Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 1999 U.S. App. LEXIS 9729 (4th Cir. 1999); *see also* Sec. IV(A), *supra*, citing a number of North Carolina federal court cases applying *Daubert* standards to differential diagnosis opinions on causation. As the *Reference Guide on Medical Testimony* explains, differential diagnosis has been recognized in jurisdictions across the country as "an accepted method that a medical expert may employ to offer testimony that satisfies *Daubert*." *Reference Guide on Medical Testimony*, 690 (citing *Feliciano-Hill v. Principi*, 439 F.3d 18, 25 (1st Cir. 2006) ("[W]hen an examining physician calls upon training and experience to offer a differential diagnosis . . . most courts have found no Daubert problem."); *Clausen v. M/V New Carissa*, 339 F.3d 1049, 1058–59 (9th Cir. 2003) (recognizing differential diagnosis as a valid methodology); *Mattis v. Carlon Elec. Prods.*, 295 F.3d 856, 861 (8th Cir. 2002) ("A medical opinion based upon a proper differential diagnosis is sufficiently reliable to satisfy [*Daubert*.]").

[12] *See* Sec. IV(H), *infra*, regarding *ipse dixit* opinions.

However, if the court finds that an expert employs an incomplete or unreliable differential diagnosis then the opinion will be inadmissible under a *Daubert* standard. *See Reference Guide on Medical Testimony*, 690 (citing *Wilson v. Taser Int'l, Inc.*, 2008 WL 5215991, at *5 (11th Cir. Dec. 16, 2008) ("[N]onetheless, Dr. Meier did not perform a differential diagnosis or any tests on Wilson to rule out osteoporosis and these corresponding alternative mechanisms of injury. Although a medical expert need not rule out every possible alternative in order to form an opinion on causation, expert opinion testimony is properly excluded as unreliable if the doctor 'engaged in very few standard diagnostic techniques by which doctors normally rule out alternative causes and the doctor offered no good explanation as to why his or her conclusion remained reliable' or if 'the defendants pointed to some likely cause of the plaintiff's illness other than the defendants' action and [the doctor] offered no reasonable explanation as to why he or she still believed that the defendants' actions were a substantial factor in bringing about that illness.'"); *Williams v. Allen*, 542 F.3d 1326, 1333 (11th Cir. 2008) ("Williams also offered testimony from Dr. Eliot Gelwan, a psychiatrist specializing in psychopathology and differential diagnosis. Dr. Gelwan conducted a thorough investigation into Williams' background, relying on a wide range of data sources. He conducted extensive interviews with Williams and with fourteen other individuals who knew Williams at various points in his life.") (involving a capital murder defendant petitioning for habeus corpus offering supporting expert witness); *Bland v. Verizon Wireless, L.L.C.*, 538 F.3d 893, 897 (8th Cir. 2008) ("Bland asserts Dr. Sprince conducted a differential diagnosis which supports Dr. Sprince's causation opinion. We have held, 'a medical opinion about causation, based upon a proper differential diagnosis is sufficiently reliable to satisfy Daubert.' A 'differential diagnosis [is] a technique that identifies the cause of a medical condition by eliminating the likely causes until the most probable cause is isolated.'") (stating expert's incomplete execution of differential diagnosis procedure rendered expert testimony unsatisfactory for *Daubert* standard) (citations omitted); *Lash v. Hollis* 525 F.3d 636, 640 (8th Cir. 2008) ("Further, even if the treating physician had specifically opined that the Taser discharges caused rhabdomyolysis in Lash Sr., the physician offered no explanation of a differential diagnosis or other scientific methodology tending to show that the Taser shocks were a more likely cause than the myriad other possible causes suggested by the evidence.") (finding lack of expert testimony with differential diagnosis enough to render evidence insufficient for jury to find causation in personal injury suit); *Feit v. Great West Life & Annuity Ins. Co.*, 271 Fed. App'x. 246, 254 (3d Cir. 2008) ("However, although this Court generally recognizes differential diagnosis as a reliable methodology the differential diagnosis must be properly performed in order to be reliable. To properly perform a differential diagnosis, an expert must perform two steps: (1) 'Rule in' all possible causes of Dr. Feit's death and (2) 'Rule out' causes through a process of elimination whereby the last remaining potential cause is deemed the most likely cause of death.") (ruling that district court not in error for excluding expert medical testimony that relied on an improperly performed differential diagnosis) (citations omitted); *Glastetter v. Novartis Pharms. Corp.*, 252 F.3d 986 (8th Cir. 2001)).

G. Peer Reviewed Literature

The importance of supporting an expert's opinions – whether on standard of care or causation – with peer-reviewed publications on point cannot be overstated under a *Daubert*

standard. Whether an expert's methods have "been subjected to peer review and publication" was one of the original four factors cited in *Daubert*, and trial courts have a tendency to latch onto this issue as a make-or-break factor. That being said, peer review is not necessarily controlling in every case, and the lack of peer review is not necessarily fatal in certain circumstances.

The 4th Circuit has held that "Under the *Daubert* standard, epidemiological studies are not necessarily required to prove causation, as long as the methodology employed by the expert in reaching his or her conclusion is sound." *Benedi*, 66 F.3d at 1384. This view has support in other circuits as well. *See Kannankeril v. Terminix Int'l, Inc.*, 128 F.3d 802, 809 (3d Cir. 1997) (holding that lack of peer review or publication was not dispositive where the expert's opinion was supported by "widely accepted scientific knowledge"); *Primiano v. Cook*, 598 F.3d 558 (9th Cir. 2010) (holding that lack of peer review or publication not fatal where the expert's testimony was based on sufficient experience with relevant medical issues throughout career); *See also, Dickenson v. Cardiac & Thoracic Surgery of E. Tenn.*, F.3d 976 (6th Cir. 2004); *Schneider ex rel. Estate of Schneider v. Fried*, 320 F.3d 396 (3rd Cir. 2003).

H. "Ipse dixit" opinions

General causation opinions are easier to support under a *Daubert* standard than specific causation. For example, an expert may be able to produce a wealth of published peer-reviewed literature showing that a certain drug or toxin ***can*** lead to a disease or set of diseases; however, if that expert cannot demonstrate with sufficient facts and data that those same drugs or toxins ***more likely than not*** caused the plaintiff's disease or condition then the opinion is inadmissible. *See Joiner*, 522 U.S. at 146 ("a court may conclude that there is simply too great an analytical gap between the data and the opinion offered," and "nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert.")

This new standard for specific causation opinions may strip certain medical malpractice cases of their precedential value. For example, in *Day v. Brant* the Court of Appeals reasoned:

> "Although Dr. Wyatt used the word 'speculation' in portions of his testimony, our review of the entirety of his testimony indicates that Dr. Wyatt was not labeling as speculation his opinion that if Duncan's liver laceration had been diagnosed and treated, he would have had a 51% chance of survival. Rather, we read his testimony as acknowledging that the practice of putting a specific percentage on Duncan's chance of survival is inherently speculative. Dr. Wyatt, however, ultimately testified that 'most' patients with Duncan's injury who are treated in accordance with the standard of care will survive and that he believes Duncan would have survived.' This opinion is sufficient to establish a probability of survival regardless of the precise numerical percentage used."

Day, 697 S.E.2d at 352. It is important to note that in *Day*, Dr. Wyatt also explained in detail how and why the plaintiff would likely have survived had the standard of care been followed. However,

under the *Daubert* standard, even with an acceptable methodology and peer-reviewed literature backing the expert up on general causation, simply testifying that "most patients" who are treated according to the standard of care survive this may now be an inadmissible specific causation opinion, and instead will considered the "*ipse dixit*" of the expert. *Joiner*, 522 U.S. at 146.

I. Rule 9(j)

The newly amended Rule 9(j) in North Carolina requires that an expert certify that he/she has reviewed "all medical records pertaining to the alleged negligence that are available to the plaintiff after reasonable inquiry." N.C. Gen. Stat. § 1A-9(j)(1). This rule will likely increase the expert's chances of ultimate qualification under the new Rule 702(a) given that it should always be considered by the trial court a more reliable method of rendering an opinion by reviewing "all medical records" reasonably available, as opposed to just a selection sent by the plaintiff's attorney.

What remains to be seen is how long it will take the defense bar to begin arguing that the new Rule 702(a) requires a *Daubert* standard to be applied at the time of the initial pleading and Rule 9(j) expert opinion. A recent case from Georgia (a state that expressly adopted both the *Daubert* standard as well as an expert certification affidavit pleading requirement) may offer some help to plaintiffs in defending this kind of attack. *See Houston v. Phoebe Putney Memorial Hosp., Inc.*, 295 Ga. App. 674, 673 S.E.2d 54 (2009) (Georgia court of appeals reversed trial court holding that the *Daubert* standard did not apply to affidavits of professional negligence required to be filed with the complaint, reasoning that conclusory opinions, which would not be admissible under *Daubert*, are permissible in the affidavit of professional negligence.)

V. Conclusion

Much remains unclear as we wade into the unsettled waters that the new Rule 702(a) have brought. Even if North Carolina adopts the *Daubert* standard in interpreting the new rule, ***standard of care opinions*** in medical malpractices cases are likely to be unaffected, and the substantial body of case in North Carolina interpreting standard of care admissibility requirements is likely to remain good law. However, ***medical causation opinions*** are likely to undergo significant change, and the stricter "gatekeeping" requirements under *Daubert* and its progeny are likely to keep out many opinions that heretofore have been considered admissible under North Carolina law. Given that our trial courts will almost certainly look to guidance from the federal courts on interpreting the new Rule 702(a) the small 4th Circuit and North Carolina federal district court bodies of case law applying *Daubert* in medical malpractice and related contexts will be an invaluable resource. ***When in doubt, arm your experts with as much peer reviewed literature as you can find, and hold their hand through the qualification process***. This is especially true for seasoned medical malpractice experts who will be used to the old and more relaxed standards from *Goode* and *Howerton*. The *Daubert* standard does not favor plaintiffs, and the sooner we come to grips with that reality and begin preparing properly, the better chance we have of surviving in this unchartered territory. Although I cannot cite you any peer reviewed literature supporting how much better our chances of survival will be, just trust me… it's my "*ipse dixit*" opinion on the matter.

VI. Appendix

A. Helpful Cases and Reference Material

Reference Manual on Scientific Evidence:
The Federal Judicial Center publishes a "Reference Manual on Scientific Evidence," now in its third edition. The Manual ranges in topics from a basic overview of "The Admissibility of Expert Testimony" to "Reference Guide on Medical Testimony." The stated purpose of the Manual is to assist federal judges in managing scientific evidence. A copy of the complete manual is available for free online at www.fjc.gov under publications.

***Daubert* State Report:**
A complete report of all 50 fifty states regarding the stance each has taken with respect to the adoption or rejection of *Daubert* (current as to March 31, 2006) can be found online here:
http://www.atlanticlegal.org/daubertreport.pdf

***Day v. Brant* case summary:**

Day v. Brant,
___ N.C. App.___, 721 S.E.2d 238; 2011 N.C. App. LEXIS 61

Prior History:
Iredell County, 04 CVS 2917
Day v. Brant, 205 N.C. App. 348, 697 S.E.2d 345 (2010)

NCCOA Filed Date:
July 20, 2010

Plaintiff Attorney(s):
John J. Korzen
David A. Manzi
Sam McGee (NCAJ *amicus*)
Adam Stein (NCAJ *amicus*)

Defense Attorney(s):
Norman F. Klick, Jr. (Carruthers & Roth)
Richard Vanore
Robert N. Young (Carruthers & Roth)
David Manzi (Peniston & Associates)

Judge (Author of opinion):
Geer, Martha

Judges (Concurring / Dissenting):
Hunter, Robert C. (concur)
Calabria, Ann Marie (concur)

Type of Medical Care Involved:
Emergency Room; DDX after MVA Trauma

Decision for Plaintiff or Defense?
Plaintiff

Procedural History:
Appeal by plaintiffs from Judge Christopher Collier's grant of directed verdict to defendants. This appeal was originally heard before the NCCOA with opinion filed July 20, 2010. *See*, *Day v. Brant*, 205 N.C. App. 348, 697 S.E.2d 345 (2010). Defendants' petition for rehearing was granted, and this new opinion supersedes and replaces the July 20, 2010 opinion.

Background Facts:
Decedent was injured in a motor vehicle accident and brought to defendant Lake Norman Regional Medical Center's Emergency Department. He presented with a seatbelt abrasion from his left shoulder to his right upper abdomen, bruises on his arms and legs, and reporting chest and neck pain. Multiple x-rays, CT scans and blood work was taken, however the defendant ER physicians never took ultrasound or

CT of decedent's abdomen. Decedent was discharged home with pain medications. Later that night, decedent was found dead in his home from a liver rupture and internal bleeding.

Key Case Facts:
At trial, plaintiff called one standard of care expert and one causation expert.

- **Plaintiff's standard of Care expert.** Plaintiff called Dr. Paul Mele, a board certified emergency medicine physician with 20 years of experience, who opined that defendants breached the standard of care by failing to properly consider abdominal trauma based on decedent's signs and symptoms. Dr. Mele testified, *inter alia*, that the liver and spleen are most commonly injured after blunt force trauma to the abdomen; a seatbelt alone can injure these organs; and defendant ER doctors should have considered an abdominal injury despite the fact that decedent was reporting no abdominal pain or broken ribs.

- **Plaintiff's causation expert.** Plaintiff called Dr. James O. Wyatt, III, an expert trauma surgeon, who testified that had decedent been given proper initial and subsequent management after presentation to the ED, he would have more likely than not survived. Specifically, Dr. Wyatt testified that had defendants performed a CT of decedent's abdomen or pelvis they would have been able to make the diagnosis of a ruptured liver; if that diagnosis had been made the decedent would have been admitted to the hospital where the injury could have been treated; the survival rate of patients like decedent who are properly admitted and treated is "excellent (>51%);" and if decedent had been treated in the hospital properly "he would have survived" the liver rupture.

At the close of plaintiff's evidence, defendants moved for a directed verdict on two general bases: (1) plaintiff's standard of care expert was not qualified, and (2) plaintiff's causation expert had not shown proximate cause.

Specifically, defendant made a multitude of arguments :

- **Defendant Argument 1:** Plaintiff's standard of care opinion should have been excluded because expert never testified that he was a licensed physician;
- **Defendant Argument 2:** Plaintiff's standard of care opinion should have been excluded because expert failed to show he was familiar with the defendant's medical community at the time of the alleged breach;
- **Defendant Argument 3:** Plaintiff's standard of care opinion should have been excluded because expert acquired most of his information regarding the defendant's medical community after reaching his opinion and having his deposition taken;
- **Defendant Argument 4:** Plaintiff's standard of care opinion should have been excluded because expert never testified to the specific things he learned about defendant's medical community, and did not give any specific testimony regarding the physician skill, training, facilities, equipment, funding or physical and financial environment of the defendant medical community;
- **Defendant Argument 5:** Plaintiff's standard of care opinion should have been excluded because expert incorrectly applied a national standard of care to defendants;
- **Defendant Argument 6:** Plaintiff's causation opinion should have been excluded because expert's opinions regarding the decedent's chance of survival had he been admitted to the hospital amounted to mere speculation;
- **Defendant Argument 7:** Plaintiff's causation opinion should have been excluded because expert himself admitted that his opinion was "speculation;"
- **Defendant Argument 8:** Plaintiff's causation opinion should have been excluded because expert merely testified that decedent would have "had a better chance of survival" had he been properly treated by defendants.

Issue(s):

Was plaintiff's testimony on standard of care and causation sufficient to go to the jury in the face of all the above arguments?

Holding:
Yes. The trial court improperly granted defendant's motion for directed verdict on both grounds.

Rules / Controlling Authority – Defendant Argument 1:
Rule 702(b) requires an expert giving medical standard of care testimony to be a "licensed health care provider in this State or another state."

Analysis & Arguments – Defendant Argument 1:
Even though expert never specifically stated he was a licensed physician in any state, and even though he was never asked this question, he testified that he was an emergency medicine physician, that he was board certified, that he used to have emergency room privileges at Rex Hospital in Raleigh, North Carolina, and that he now had other hospital privileges at Rex Hospital. A jury could reasonably infer from this testimony that Dr. Mele did in fact have a medical license.

Rules / Controlling Authority – Defendant Argument 2:
Pursuant to G.S. 90-21.12, "[i]f a plaintiff's standard of care expert witness 'fail[s] to demonstrate that he [is] sufficiently familiar with the standard of care 'among members of the same health care profession with similar training and experience situated in the same or similar communities at the time of the alleged act giving rise to the cause of action,' then the 'plaintiff [is] unable to establish an essential element of his claim, namely, the applicable standard of care,' and the trial court properly enters judgment on behalf of the defendant." *Day* 721 S.E.2d at 243 (quoting *Smith*, 159 N.C. App. at 197, 582 S.E.2d at 673)).

"An expert witness may testify regarding this standard of care "'when that physician is familiar with the experience and training of the defendant and either (1) the physician is familiar with the standard of care in the defendant's community, or (2) the physician is familiar with the medical resources available in the defendant's community and is familiar with the standard of care in other communities having access to similar resources.'" *Id*. (quoting *Purvis v. Moses H. Cone Mem'l Hosp. Serv. Corp.*, 175 N.C. App. 474, 478, 624 S.E.2d 380, 384 (2006)).

Analysis & Arguments – Defendant Argument 2:
The court pointed out all that plaintiff's expert had done to familiarize himself with the standards of practice of defendants and similar medical communities, including: he had reviewed defendants' deposition transcripts; he had reviewed information on defendant's medical community including population, number of hospital beds, facilities in hospital, kinds of patients seen, and diagnostic services available – all of which were similar to hospitals in which he had worked; he had done internet research demographic information on defendant's community and determined it to be similar to Wake County where he practiced; during his career he had the opportunity to consult with physicians working in communities similar to that of defendants' and determined the standard of care to be the same as his own community; and finally, he had reviewed the defendants' medical group website to learn about their qualifications, training and experience, which he concluded was comparable to his own.

Based on the above, the court concluded that the expert was sufficiently familiar under G.S. 90-21.12 by analogizing to four seminal cases where similar actions by the expert were enough to qualify him: *Billings v. Rosenstein*, 174 N.C. App. 191, 194, 619 S.E.2d 922, 924 (2005); *Pitts v. Nash Day Hosp., Inc.*, 167 N.C. App. 194, 199, 605 S.E.2d 154, 157 (2004), *aff'd per curiam*, 359 N.C. 626, 614 S.E.2d 267 (2005); *Coffman v. Roberson*, 153 N.C. App. 618, 624, 571 S.E.2d 255, 259 (2002), *disc. review denied*, 356 N.C. 668, 577 S.E.2d 111 (2003); *Leatherwood v. Ehlinger*, 151 N.C. App. 15, 22-23, 564 S.E.2d 883, 888 (2002), *disc. review denied*, 357 N.C. 164, 580 S.E.2d 368 (2003).

Rules / Controlling Authority – Defendant Argument 3:
The court cited *Roush v. Kennon*, 188 N.C. App. 570, 576, 656 S.E.2d 603, 607, *disc. review denied*, 362 N.C. 361, 664 S.E.2d 309 (2008) as controlling authority where NCCOA rejected the argument that an expert who "supplemented his understanding of the applicable standard of care" after his deposition by researching the defendant medical community automatically disqualified his opinion testimony at trial.

Analysis & Arguments – Defendant Argument 3:
The court here concluded that there was "no meaningful distinction between this case and *Roush*," and therefore the plaintiff's expert opinion could not be disqualified on this basis. *Day*, 721 S.E.2d at 244.

Rules / Controlling Authority – Defendant Argument 4:
"[A]n expert witness cannot simply assert that he is familiar with the applicable standard of care without also providing an explanation of the basis for his familiarity." *Id.* (citing *Smith*, 159 N.C. App. at 196, 582 S.E.2d at 672).

However, "Defendants have cited no authority requiring that an expert witness testify 'as to what he specifically learned,' and we have found none." *Id.*

Analysis & Arguments – Defendant Argument 4:
The court reasoned that because "Dr. Mele established in his testimony that he had done research and had personal knowledge that supplied the information that the expert in *Smith* lacked . . . his testimony provided a basis -- his research and personal knowledge -- for his claim of familiarity. This case does not involve a bare statement of familiarity such as that present in *Smith*." *Id.*

Rules / Controlling Authority – Defendant Argument 5:
"It is, however, established that mere mention of a national standard is not sufficient to warrant disregard of an expert's testimony if the expert has testified regarding his or her familiarity with the standard of care in the same or similar communities." *Id.* (citing *Roush*, 188 N.C. App. at 576, 656 S.E.2d at 607-08; *Pitts*, 167 N.C. App. at 197, 605 S.E.2d at 156; *Cox v. Steffes*, 161 N.C. App. 237, 244, 246, 587 S.E.2d 908, 913, 914 (2003), *disc. review denied*, 358 N.C. 233, 595 S.E.2d 148 (2004)).

Analysis & Arguments – Defendant Argument 5:
Even though plaintiff's expert stated several times that the standard of care for emergency room physicians in this situation would be "the same in any city in America," he "repeatedly rejected defense counsel's attempt to extend [his] opinion to all cities and limited his opinion, as our courts require, to those cities having the same facilities, resources, and training available. In any event . . . he specifically testified that the standard of care he was applying was the standard of care for defendants' community, just like the experts in *Roush*, *Pitts*, and *Cox*."

Rules / Controlling Authority – Defendant Argument 6:
Where a causation expert testifies that it's "possible" a plaintiff's injury could have been prevented had defendants admitted plaintiff to the hospital, but also gives "a detailed explanation of how admission to a hospital . . . could have prevented plaintiff's [injury]," then the testimony raises "more than a 'mere possibility or conjecture' and [is] sufficient to withstand a directed verdict.'" *Id.* at 249 (quoting *Felts v. Liberty Emergency Serv., P.A.*, 97 N.C. App. 381, 388-89, 388 S.E.2d 619, 623 (1990)).

"*Howerton* addresses the test applicable in determining the *admissibility* of expert testimony. In *Howerton*, our Supreme Court set out a 'three-step inquiry for evaluating the admissibility of expert testimony: (1) Is the expert's proffered method of proof sufficiently reliable as an area for expert testimony? (2) Is the witness testifying at trial qualified as an expert in that area of testimony? (3) Is the expert's testimony relevant?' *Id.* at 247 (quoting *Howerton v. Arai Helmet Ltd.*, 358 N.C. 440, 458, 597 S.E.2d 674, 686 (2004)).

"Our Supreme Court in *Holley v. ACTS, Inc., 357 N.C. 228, 232, 581 S.E.2d 750, 753 (2003)*, warned that 'the standards for admissibility of expert opinion testimony have been confused with the standards for sufficiency of such testimony.' Expert testimony as to causation 'is admissible if helpful to the jury,' although it may be 'insufficient to prove causation, particularly when there is additional evidence or testimony showing the expert's opinion to be a guess or mere speculation.'" *Id.*

"[W]hen the challenged expert testimony relates to *causation* such admitted testimony is competent 'as long as the testimony is helpful to the jury and based sufficiently on information reasonably relied upon under Rule 703[.]" *Id.* at 248 (quoting *Weaver v. Sheppa*, 186 N.C. App. 412, 651 S.E.2d 395 (2007), *aff'd*

per curiam by an equally divided court, 362 N.C. 341, 661 S.E.2d 733 (2008), at 416-17, 651 S.E.2d at 399.

Analysis & Arguments – Defendant Argument 6:
Here, on top of plaintiff's causation expert testimony that plaintiff would have "had a greater than 50 percent chance of surviving" had he been admitted to defendant hospital, he "explicitly set out how, if the laceration had been discovered, a rupture and internal bleeding could have been prevented or stopped. Under *Felts*, this was sufficient evidence of proximate cause." *Id.*

The court dismissed defendants' reliance on three cases regarding speculative causation opinions. First, the court distinguished *Young v. Hickory Bus. Furn.*, 353 N.C. 227, 230, 538 S.E.2d 912, 915 (2000), and *Azar v. Presbyterian Hosp.*, 191 N.C. App. 367, 371, 663 S.E.2d 450, 453 (2008), *cert. denied*, 363 N.C. 372, 678 S.E.2d 232 (2009), by pointing out that the decedent's cause of death was not in dispute here like it was in *Young* and *Azar*. Second, the court distinguished *Campbell v. Duke Univ. Health Sys., Inc.*, 691 S.E.2d 31, 37 (2010) because here, unlike in *Campbell*, plaintiff's expert is able to point to defendants' failure to diagnose decedent's rupture liver as a specific omission causing the death.

Lastly, the Court favorably analogized this case to *Gaines v. Cumberland Cnty. Hosp. Sys., Inc.*, 195 N.C. App. 442, 446, 672 S.E.2d 713, 716 (2009), *reh'g granted*, 203 N.C. App. 213, 222-23, 692 S.E.2d 119, 124-25, *disc. review denied*, 364 N.C. 324, 700 S.E.2d 750 (2010), concluding that similar to *Gaines*, "Dr. Wyatt had experience treating patients with comparable liver lacerations, specifically listed what would have been done had the lacerations been diagnosed and Duncan hospitalized, and testified that 'most' patients with Duncan's level of lacerations survive if hospitalized and properly managed. Under *Gaines*, this testimony was sufficient to take the case to the jury." *Id.* at 251.

Rules / Controlling Authority – Defendant Argument 7:
If expert causation testimony "is based merely upon speculation and conjecture . . . it is no different than a layman's opinion, and as such, is not sufficiently reliable to be considered competent evidence on issues of medical causation." *Day*, 697 S.E.2d at 352 (quoting *Azar*, 191 N.C. App. at 371, 663 S.E.2d at 453).

Analysis & Arguments – Defendant Argument 7:
"Although Dr. Wyatt used the word 'speculation' in portions of his testimony, our review of the entirety of his testimony indicates that Dr. Wyatt was not labeling as speculation his opinion that if Duncan's liver laceration had been diagnosed and treated, he would have had a 51% chance of survival. Rather, we read his testimony as acknowledging that the practice of putting a specific percentage on Duncan's chance of survival is inherently speculative." *Id.*

"Dr. Wyatt, however, ultimately testified that 'most' patients with Duncan's injury who are treated in accordance with the standard of care will survive and that he believes Duncan would have survived.' This opinion is sufficient to establish a probability of survival regardless of the precise numerical percentage used." *Id.*

Rules / Controlling Authority – Defendant Argument 8:
"[P]roof of proximate cause in a malpractice case requires more than a showing that a different treatment would have improved the patient's chances of recovery . . . The connection or causation between the negligence and death must be probable, not merely a remote possibility." *Id.* at 252 (quoting *White v. Hunsinger*, 88 N.C. App. 382, 387, 363 S.E.2d 203, 206 (1988)).

Analysis & Arguments – Defendant Argument 8:
"Dr. Wyatt specifically testified that when patients with liver lacerations like that suffered by Duncan are hospitalized, monitored, and treated, 'most' of them survive. He further testified that if the defendants had followed the standard of care, Duncan would have had a better than 51% chance of survival and that he believes Duncan would have survived. In sum, Dr. Wyatt's testimony established that Duncan's survival was not merely possible but rather was probable if defendants had complied with the standard of care." *Id.*

"Although defendants point out that Dr. Wyatt could not say to an absolute certainty that Duncan would have survived, absolute certainty is not required." *Id.*

Impact of Decision on Plaintiff's Practice:
This case is a practically a miniature legal treatise on how to overcome all the common defense objections to ***both*** standard of care and causation opinions. All of the rulings and analysis used here to find the plaintiff's expert opinions admissible could later be used to prop up your own experts, or serve as a roadmap for ideas on how to attack the defense's experts. This is especially true for the court's analysis of the law on "mere speculation or conjecture" causation opinions. It would be wise to store a copy of this case in your brief bank just to have all of this law in one place.

In regard to **Defendant Argument 3** above, be wary of defense attorneys who attempt to get your consent to a discovery scheduling order that prevents your expert witnesses from reviewing materials or doing any research after his or her deposition. This is emerging as a trend with some defense DSO's, and when in place it totally cripples your witness from curing before trial any 90-21.12 deficiencies that may pop up during his or her deposition.

Crocker v. Roethling **case summary:**

Crocker v. Roethling,
___ N.C. App.___, 719 S.E.2d 83, 2011 N.C. App. LEXIS 2338

Prior History: Johnston County, 04 CVS 2571 *Crocker*, 363 N.C. 140, 675 S.E.2d 625 (2009) (aka "Crocker II")	**NCCOA Filed Date:** April 12, 2011
Plaintiff Attorney(s): Wade Byrd	**Defense Attorney(s):** Sammy Thompson (SmithAnderson) Bill Moss (SmithAnderson) Robbie Desmond (SmithAnderson)
Judge (Author of opinion): Beasley, Cheri	**Judges (Concurring / Dissenting):** McGee, Linda (concur) Stroud, Donna (concur)
Type of Medical Care Involved: Labor and Delivery, Shoulder Dystocia	**Decision for Plaintiff or Defense?** Defense

Procedural History:
Appeal by Plaintiff from Judge Rusty Duke's order disqualifying Plaintiff's expert and granting summary judgment to defendants.

Background Facts:
Plaintiff-mother underwent an induction of labor at Wayne Memorial Hospital in Goldsboro (Wayne County), and delivery became complicated by should dystocia. Defendant obstetrician attempted several techniques to relieve the shoulder dystocia, but never attempted the Zavanelli maneuver where the fetus is pushed back into the uterus and the baby is delivered by c-section. Plaintiff's daughter died from injuries sustained during birth.

Plaintiffs filed suit against defendants alleging a failure to perform the Zavanelli maneuver, and designated Dr. John Elliot, an Ob/Gyn specializing in high risk obsetrics, as their sole expert. After taking Dr. Elliot's deposition, defendants moved for and were granted summary judgment on the basis that Dr. Elliot was not qualified to opine on the standard of care in Goldsboro. After a long appeals process, the

N.C. Supreme Court took the case on discretionary review and, due to the "close call" and conflicting deposition/affidavit testimony from Dr. Elliot, voted to remand the case to the trial court to conduct an adversarial *voir dire* examination of Dr. Elliot to determine the admissibility of his standard of care opinions. *Crocker v. Roethling (Crocker II)*, 363 N.C. 140, 675 S.E.2d 625 (2009) (Martin, J. concur) (see Appendix).

Key Case Facts Regarding Dr. Elliot's Familiarity with SOC [13]:
"On 23 February 2010, the trial court held the *voir dire* hearing. Dr. Elliott stated that for 27 years he had practiced high risk obstetrics in Maricopa County, Arizona, an area with a population of approximately 4.5 million. He further testified that he had neither performed nor witnessed a Zavanelli maneuver, and was unaware of any of the other 14 high risk obstetricians in his practice ever having performed this maneuver. He also did not know whether a Zavanelli maneuver had ever been performed either in Goldsboro, or anywhere else in the state of North Carolina. However, based on his practice, his experiences as an expert witness reviewing approximately 600 malpractice cases from 45 states, and his belief 'that there is a national standard of care for most things,' Dr. Elliott stated that he was familiar with the standards of practice of a physician practicing in a hospital such as Wayne Memorial." *Crocker*, 719 S.E.2d at 85.

Issue(s):
Based on the *voir dire* testimony, did Dr. Elliot demonstrate sufficient familiarity with the applicable standard of care?

Holding:
No.

Rules / Controlling Authority:
In order to be admissible, an expert's SOC/breach opinions must establish a sufficient knowledge of "the standards of practice among members of the same health care profession with similar training and experience situated in the same or similar communities at the time of the alleged act giving rise to the cause of action." N.C. Gen. Stat. § 90-21.12 (2009)

"Although it is not necessary for the witness testifying . . . to have actually practiced in the same community as the defendant, the witness must demonstrate that he is familiar with the standard of care in the community . . . or the standard of care of similar communities." *Crocker*, 719 S.E.2d at 86 (quoting *Smith v. Whitmer*, 159 N.C. App. 192, 196, 582 S.E.2d 669, 672 (2003)).

"This Court has stated that the 'similar community' standard with regards to the standard of care in medical malpractice cases 'encompasses more than mere physician skill and training[.] It also encompasses variations in facilities, equipment, funding, and also the physical and financial environment of a particular community.'" *Id*. at 86 (quoting *Pitts v. Nash Day Hosp.*, Inc., 167 N.C. App. 194, 201, 605 S.E.2d 154, 159 (2004)).

"When the standard of care for a given procedure is 'the same across the country, an expert witness familiar with that standard may testify despite his lack of familiarity with the defendant's community.'" *Id*. at 86 (quoting *Haney v. Alexander*, 71 N.C. App 731, 736, 323 S.E.2d 430, 434 (1984)).

"This Court, however, has recognized very few 'uniform procedures' to which a national standard may apply, and to which an expert may testify . . . This Court has been particularly reluctant to find a national standard for especially complex procedures." *Id*. at 86-87 (citing *Henry v. Southeastern Ob-Gyn Assocs.*, P.A., 145 N.C. App. 208, 211, 550 S.E.2d 245, 247 (2001)).

[13] Note: This opinion fails to identify or discuss the plethora of materials that plaintiff's counsel provided to Dr. Elliot to help educate him on the medical facilities, equipment, area statistics, demographics – all of which our courts have previously considered appropriate materials to assist an expert in familiarizing himself/herself with the applicable standard of care in defendant's community. This author encourages readers to examine the briefs on the NCCOA electronic filing site to see the true extent to which Dr. Elliot demonstrated a familiarity with the Goldsboro/Wayne County community.

Analysis & Arguments:
"Dr. Elliott practices mainly at larger hospitals, one of which performs more than 6,000 deliveries per year, and is located in a metropolitan area with a population of 4.5 million people served by some 200 obstetricians. That hospital hardly seems comparable to Wayne County, and Goldsboro, with a population of approximately 100,000. Wayne Memorial has six labor and delivery suites compared to 36 at Dr. Elliott's tertiary referral hospital. While Dr. Elliott did claim to have familiarity with smaller hospitals similar to Wayne Memorial based on outreach education and consulting privileges, he never practiced medicine at these hospitals." *Id*. at 86.

"Further, Dr. Elliott has never performed a Zavanelli maneuver. He has never witnessed the maneuver. He was unaware of any of the other 14 high risk obstetricians with whom he practices ever having performed it. He did not know whether a Zavanelli maneuver had ever been performed either in Goldsboro or, for that matter, in the state of North Carolina. Quite simply, Dr. Elliott failed to demonstrate that this rarely-employed maneuver is the standard of care in Goldsboro, North Carolina." *Id*.

"Dr. Elliott argued that there is a national standard of care for shoulder dystocia, but that argument is unavailing . . . A national standard of care cannot be applied to this case because 'an infant suffering from shoulder dystocia . . . involves medical procedures considerably more complicated than the taking of vital signs or the placement of bedpans.'" *Id*. at 86-87 (quoting *Henry v. Southeastern Ob-Gyn Assocs*., P.A., 145 N.C. App. 208, 211, 550 S.E.2d 245, 247 (2001)).

"We conclude that there is ample support in the record for a finding that Dr. Elliott was not qualified to testify in this case. The trial court, therefore, did not abuse its discretion in excluding his testimony." *Id*. at 87.

Impact of Decision on Plaintiff's Practice:
As noted in the Footnote above, this opinion simply ignores the absolute wealth of information plaintiff's counsel provided to Dr. Elliot regarding the Goldsboro medical community, and the amount of that information that was absorbed and appreciated by Dr. Elliot during his *voir dire* testimony. This opinion highlights just how difficult it is to overturn the trial court on the abuse of discretion standard for these evidentiary decisions. Moreover, this opinion underscores the importance of getting your expert to not just spout a rote memorization of the facts and data he/she's learned about the subject community, but to take it a step further a demonstrate to the trial court ***how*** those facts and data helped them understand what standard of care actually applies.

B. Post *Daubert* FRE 702 case annotations from LEXIS relevant to medical malpractice issues

II.QUALIFICATION OF EXPERTS

44. Medical and health matters

To be considered reliable under Daubert standard, expert medical witness does not have to demonstrate familiarity with accepted medical literature or published standards in other areas of specialization in order to testify as to standards of care applicable to those areas: (1) concern with keeping courtroom door closed to junk science is not served by excluding testimony that is supported by extensive relevant experience; (2) medical expert's extensive experience in other areas of specialization is generally sufficient to render his or her testimony reliable at to those areas under Fed. R. Evid. 702; and (3) there is no requirement that medical expert must cite published studies in order to reliably conclude that particular object or set of circumstances caused particular illness or medical condition, and any lack of textual support goes to weight, not admissibility, of expert's testimony. Dickenson v Cardiac & Thoracic Surgery of E. Tenn, P.C. (2004, CA6 Tenn) 388 F3d 976, cert den (2005) 544 US 961, 125 S Ct 1731, 161 L Ed 2d 602 and cert den (2005) 544 US 961, 125 S Ct 1731, 161 L Ed 2d 602.

In action in which plaintiff homeowners filed suit against defendants, operator of dry-cleaning business and others, alleging claims of negligence, trespass, and nuisance, for injuries allegedly caused by perchloroethylene (PCE) contamination on their property from defendants' dry-cleaning business, both experts lacked qualifications to

testify as to general causation in this case where (1) one expert had no professional experience or training in toxicology or epidemiology and had never treated patient for exposure to PCE; and (2) second expert had no professional experience or training in epidemiology or toxicology. Cunningham v Masterwear, Inc. (2007, SD Ind) 73 Fed Rules Evid Serv 257, summary judgment gr, motions ruled upon, complaint dismd (2008, SD Ind) 2008 US Dist LEXIS 21951, affd (2009, CA7 Ind) 569 F3d 673.

District court would not admit opinion proffered by treating physician during his deposition as to qualifications of defense medical expert witness because that testimony was irrelevant, as determining whether witness was qualified to offer expert testimony under Fed. R. Evid. 702 in pending medical malpractice case was exclusively within court's province; court would rule on that issue before expert witness took stand at trial. Trout v Milton S. Hershey Med. Ctr. (2008, MD Pa) 576 F Supp 2d 673, 77 Fed Rules Evid Serv 713.

In suit where employee sued his employer for damages arising from respiratory disease he alleged was caused by exposures to certain substances at plant where popcorn was manufactured, employee's expert, physician with masters degree in public health, who was board certified in internal and occupational medicine with a specialty in occupational lung disease, who had published dozens of articles over wide array of health topics, and who had been qualified to testify in numerous state and federal courts in United States, was deemed qualified under Fed. R. Evid. 702 to testify as expert; second expert was also deemed to be qualified under Rule 702 and Daubert standard because his testimony appeared to be based on valid reasoning and methodology, Kuiper v Givaudan, Inc. (2009, ND Iowa) 602 F Supp 2d 1036, 78 Fed Rules Evid Serv 801.

Physician with general practice in internal medicine sought to testify that decedent's cardiac arrest was result of use of tasers but physician was not qualified to testify as expert witness; physician was not board certified in cardiology, toxicology, psychology, substance abuse, electro-physiology, or forensic pathology--all subjects that came to bear in case and in physician's particular theory of case; physician 's sole argument for his qualifications were that as licensed medical physician and general practitioner, he was nonetheless qualified to testify about most, if not all, medical issues, even without any other indicia of specialization; physician 's testimony drew speculative conclusions from insufficient data and physician not describe method he used to reach his conclusion and failed to provide scientific data supporting his conclusion--to permit physician to take stand would do nothing more than confuse jury. Estate of Gilliam v City of Prattville (2009, MD Ala) 667 F Supp 2d 1276, decision reached on appeal by (2011, CA11 Ala) 639 F3d 1041, 22 FLW Fed C 2003, cert den (2011, US) 132 S Ct 817, 181 L Ed 2d 526.

Medical expert was well-qualified on basis of knowledge, skill, experience, training, and education, pursuant to Fed. R. Evid. 702, because doctor, distinguished graduate of Princeton University who received his medical degree from Columbia University, had not only witnessed and treated multiple cases of venous thromboembolism, but also taught other doctors how to treat, recognize, and warn against deep venous thrombosis and pulmonary embolus. Burton v United States (2009, DC Dist Col) 668 F Supp 2d 86.

In product liability case alleging that certain drugs caused osteonecrosis of jaw, drug maker was not entitled to exclude expert opinions relating to accuracy of warnings and labels under Fed. R. Evid. 702 because witnesses could opine as to adequacy of labels from perspective of oncologists and prescribing physicians. Deutsch v Novartis Pharms. Corp. (2011, ED NY) 768 F Supp 2d 420.

In product liability case alleging that certain drugs caused osteonecrosis of jaw, drug maker was entitled to exclusion of expert testimony to extent that it opined on drug maker's motive, intent, or state of mind; however, expert could opine on medicine and science that was available at time regarding risks and benefits of drugs, and could compare that information to what was disclosed on label or in other materials drug maker presented to medical community. Deutsch v Novartis Pharms. Corp. (2011, ED NY) 768 F Supp 2d 420.

In product liability case alleging that certain drugs caused osteonecrosis of jaw, drug maker was not entitled to exclude expert testimony on dosing regimens, including benefit of less frequent dosing, insofar as they related to opinions premised on relevant medical literature; expert reviewed two studies and based his opinion on study he found to be more reliable, which was reliable methodology under Fed. R. Evid. 702. Deutsch v Novartis Pharms. Corp. (2011, ED NY) 768 F Supp 2d 420.

In product liability case alleging that certain drugs caused osteonecrosis of jaw, drug maker was not entitled to exclude expert testimony based on adverse event reports expert had not reviewed because expert did not cite those reports for their truth, but rather for accepted theory that vast number of reports contributed to plausibility of causation; such testimony was proper under Fed. R. Evid. 702 and drug maker could pursue accuracy of number of reports in cross examination at trial. Deutsch v Novartis Pharms. Corp. (2011, ED NY) 768 F Supp 2d 420.

In product liability case alleging that certain drugs caused osteonecrosis of jaw, drug maker was not entitled to exclude expert testimony based on meta-analysis because expert was qualified to provide his causation testimony for purposes of Fed. R. Evid. 702. Deutsch v Novartis Pharms. Corp. (2011, ED NY) 768 F Supp 2d 420.

In product liability case alleging that certain drugs caused osteonecrosis of jaw, drug maker was not entitled to exclude expert's testimony as to Food & Drug Administration's regulatory requirements and processes generally because expert was qualified in this area; however, expert's opinions on pharmaceutical industry standards, ghostwriting, and undisclosed company funding of publications, causation, and diagnosis were excluded because expert scattered improper personal opinions, speculation, and state of mind inferences throughout her report and expert's scope of expertise did not qualify her to opine on ethical standards in pharmaceutical industry for purposes of meeting Fed. R. Evid. 702 standard. Deutsch v Novartis Pharms. Corp. (2011, ED NY) 768 F Supp 2d 420.

Although defendants sought to exclude student's expert's opinions, defendants could challenge any purported deficiencies in expert's testimony through vigorous cross-examination, presentation of contrary evidence, and careful instruction on burden of proof, which were traditional and appropriate means of attacking shaky but admissible evidence; expert's testimony regarding student's vocational prospects and his employability was well within his range of expertise and supported student's position; fact that expert took student's bipolar diagnosis and age into account in evaluating his employability, did not transform his opinion into medical testimony that he would be unqualified to give; rather, it served to reinforce credibility of his expert opinion as vocational counselor. Benjumen v AES/Charter Bank (In re Benjumen) (2009, BC ED NY) 408 BR 9, 80 Fed Rules Evid Serv 55.

45.--Specialists

Medical expert was not required under Fed. R. Evid. 702 to have been board-certified in obstetrics and gynecology in order to testify in malpractice case on appropriate standard of care for obstetrician and on causation; because expert's credentials easily met standard for admissibility, exclusion of expert's testimony was error. Pages-Ramirez v Ramirez-Gonzalez (2010, CA1 Puerto Rico) 605 F3d 109, 82 Fed Rules Evid Serv 781.

46.--Cause of injury or death

District court did not abuse its discretion by allowing testimony of defendant's medical expert. Although not orthopedist, his testimony assisted trier of fact with relevant testimony from his expertise in neurology. His testimony pertained to cause of shoulder problems that made accident victim's surgery necessary. As physician, he could testify regarding likely type of injury one would sustain by impact of arm into shoulder joint. His study of subject qualified him to testify regarding direction one would be forced in rear-impact collision. Robinson v GEICO Gen. Ins. Co. (2006, CA8 Mo) 447 F3d 1096, 70 Fed Rules Evid Serv 217.

In patient's medical malpractice suit, alleging that physician negligently prescribed terbutaline sulfate to patient during her pregnancy, district court erred in striking portions of physician's expert witness's testimony regarding causation because expert, who had medical degree, master's degree in public health, and was board-certified in internal medicine, was qualified under Fed. R. Evid. 702 to provide competent testimony about whether cardiomyopathy could be, or in this case, was caused by particular drug, where expert reviewed patient's medical records and medical literature relied on by patient; expert did not have to be board-certified in cardiology or toxicology to express his opinion on causation. Huss v Gayden (2009, CA5 Miss) 571 F3d 442, reh den, reh, en banc, den (2009, CA5 Miss) 585 F3d 823 and cert den (2010, US) 130 S Ct 1892, 176 L Ed 2d 365.

Treating physician was qualified pursuant to Fed. R. Evid. 702 to testify on injury causation since he was orthopedic surgeon who specialized in repetitive stress injuries and he had seen more than 2,000 cases of epicondylitis. also significant to court's inquiry was fact that physician's opinion was formed prior to litigation. Granfield v CSX Transp.,Inc. (2010, CA1 Mass) 597 F3d 474, 81 Fed Rules Evid Serv 890.

Pipefitter's medical injury claim against nuclear power plant operator is denied summarily, where pipefitter's only causation expert is not qualified to render expert opinion that his bilateral cataracts were caused by on-job radiation exposure, as shown by testimony of 5 of world's leading experts in field of radiation-induced cataracts that pipefitter's "dose" could not have caused cataracts, because alleged expert has seen only 5 cases of radiation-induced cataracts and has no special knowledge of radiation physics, and his testimony as to causation of cataracts must be excluded under FRE 702. O'Conner v Commonwealth Edison Co. (1992, CD Ill) 807 F Supp 1376, 36 Fed Rules Evid Serv 589, affd (1994, CA7 Ill) 13 F3d 1090, 38 Fed Rules Evid Serv 945, 24 ELR 20689, cert den (1994) 512 US 1222, 129 L Ed 2d 838, 114 S Ct 2711 and (criticized in Cook v Rockwell Int'l Corp. (2003, DC Colo) 273 F Supp 2d 1175, 57 Envt Rep Cas 1294) and (criticized in In re Hanford Nuclear Reservation Litig. (2004, ED Wash) 350 F Supp 2d 871).

Although patient's expert nurse in medical malpractice action may have been qualified to testify as to what is breach of nurse's duty of care, she was not qualified, under Rule 702, to testify on whether breach caused patient's injury as that was medical diagnosis that was outside of her area of expertise. Elswick v Nichols (2001, ED Ky) 144 F Supp 2d 758, 50 FR Serv 3d 103, affd (2002, CA6 Ky) 50 Fed Appx 193 and (criticized in Williams v Eighth Judicial Dist. Court of Nev. (2011, Nev) 262 P3d 360, 127 Nev Adv Rep 45).

In product liability action defendant pharmaceutical company's motion to exclude or limit testimony of injured plaintiff's expert witnesses on ground that epidemiological study establishing association between fen-phen and primary pulmonary hypertension did not "fit" with facts of plaintiff's case was granted in part and denied in part; despite its inability to squarely address latency issue that plaintiff's case presented, study provided reliable, scientific evidence to support plaintiff's theory of causation. Smith v Wyeth-Ayerst Labs. Co. (2003, WD NC) 278 F Supp 2d 684.

In consumers' suit alleging that pharmaceutical company's acne medication, Accutane, caused consumers to suffer from Irritable Bowel Disease (IBD), consumers' expert witness was qualified under Fed. R. Evid. 702 to testify as to his opinion that Accutane caused IBD where expert was board-certified gastroenterologist for over 25 years, he was head of gastroenterology at hospital, he was member of peer review panels, he was lecturer, and he had authored several books on gastroenterology. In re Accutane Prods. Liab. (2007, MD Fla) 511 F Supp 2d 1288.

In arrestee's civil rights suit against District of Columbia and transit authority officer in connection with events that occurred during and after arrestee's arrest for violating subway fare evasion statute, officer's expert witness, under Fed. R. Evid. 702, could not offer his opinion as to source and severity of arrestee's injuries because expert, who was knowledgeable about police procedures, was not trained medical professional. Halcomb v Wash. Metro. Area Transit Auth. (2007, DC Dist Col) 526 F Supp 2d 24.

Opinions based on differential diagnosis are admissible only if trial court determines that expert reliably applied differential diagnosis method; thus, in evaluating reliability of opinion based on differential diagnosis, courts look at substance of expert's analysis, rather than just label. Bowers v Norfolk S. Corp. (2007, MD Ga) 537 F Supp 2d 1343, affd (2008, CA11 Ga) 300 Fed Appx 700.

In 42 USCS § 1983 wrongful death case in which warden and various prison employees moved to exclude estate administrator's expert testimony, expert was not qualified to offer an opinion as to cause of death; expert was board certified in emergency medicine, but nothing in his Curriculum Vitae or deposition showed that qualified as pathologist or had any training as pathologist; expert wanted to offer opinions and medical conclusions that he would not make in his private practice because he recognized that specific findings, determining the existence and location of deep venous thrombosis fell outside his field of training and experience, and he could not use his routine clinical approach with live patients on dead patient in present case. Clarke v Schofield (2009, MD Ga) 632 F Supp 2d 1350.

Expert's only rationale for his opinion was temporal proximity of taser incident to decedent's death and court would not admit expert testimony that sought to show that existence of temporal relationship between use of excessive force and decedent's death was sufficient to prove causal relationship between those two events, especially when there was seven-hour gap between them and testimony did not take into account decedent's prior drug use, preexisting conditions, or subsequent medical procedures. Simply put, correlation was not causation; therefore, despite expert's qualifications, his opinion testimony was not reliable enough to be admitted. Estate of Gilliam v City of Prattville (2009, MD Ala) 667 F Supp 2d 1276, decision reached on appeal by (2011, CA11 Ala) 639 F3d 1041, 22 FLW Fed C 2003, cert den (2011, US) 132 S Ct 817, 181 L Ed 2d 526.

In parents' products liability suit, expert witness was qualified for purposes of Fed. R. Evid. 702 to offer his opinion that parents' daughter suffered cardiac arrest and that prescription medication she had been taking caused her death where expert had doctorate in microbiology, medical degree, and significant pharmaceutical industry experience, and expert had written numerous peer-reviewed articles in field of clinical toxicology, medical causation, and drug safety; although expert did not prescribe drug at issue, he had clinical familiarity with it. Mack v Amerisourcebergen Drug Corp. (2009, DC Md) 671 F Supp 2d 706, CCH Prod Liab Rep P 18311, 80 Fed Rules Evid Serv 1238.

In medical malpractice cases stemming out of open-heart surgeries performed on young infants, expert who concluded that insufficient cooling time and prolonged cardiac arrest period during hemi-Fontan procedures were but for causes of infants' deaths was qualified to testify as to defendant surgeons' alleged negligence because expert's formal qualifications were unassailable and he had performed few hemi-Fontan procedures, had written articles and chapters on relevant subject matter, and had extensively reviewed relevant medical texts and journals. Madden v A.I. Dupont Hosp. for Children of Nemours Found. (2010, ED Pa) 264 FRD 209, 81 Fed Rules Evid Serv 525.

As to patient's Indiana Product Liability Act, Ind. Code § 34-20-1-1, claim of negligent failure to warn in connection with her ingestion of osteoporosis drug produced by pharmaceutical company, which patient alleged cause her to suffer from osteonecrosis of jaw (ONJ), dentist who opined that patient's ONJ was caused by drug was qualified as expert under Fed. R. Evid. 702 where witness had practiced dentistry for over 30 years; he specialized in oralfacial pain and maxillofacial radiology; he kept up to date with developments in research regarding ONJ and gave presentations on issue; and witness had practical experience in that he treated many patients that he believed developed ONJ from bisphosphonate such as drug at issue. In re Fosamax Prods. Liab. Litig. (2010, SD NY) 688 F Supp 2d 259, CCH Prod Liab Rep P 18365, 81 Fed Rules Evid Serv 517.

Unpublished Opinions

Unpublished: For admitting expert testimony under Fed. R. Evid. 702, medical causation experts must have considered and excluded other possible causes of injury; that does not necessitate exhaustive search that forces expert to disprove or discredit every possible cause other than one espoused by him, but expert must be aware of plaintiff's pertinent medical history. McNabney v Lab. Corp. of Am. (2005, CA5 Tex) 153 Fed Appx 293.

Unpublished: Decision to exclude second deposition of doctor was reversed because doctor adequately demonstrated his qualifications to express opinion on causation in this matter, and district court abused its discretion in concluding to contrary; district court erred in concluding that materials on which he relied did not support his theory of causation; there was record support for his theory of causation; district court erred in excluding doctor's theory as conclusory; and doctor's use of differential diagnosis went to weight, rather than admissibility, of his testimony. Tingey v Radionics (2006, CA10) 193 Fed Appx 747, CCH Prod Liab Rep P 17523.

Unpublished: In negligence and products liability case alleging that excessive vibration in airplane cockpit caused pilot to develop peripheral neuropathy, district court acted well within its discretion in disallowing causation portion of affidavit of pilot's treating physician, orthopedic surgeon who never claimed to be expert in neurology, because he could not offer reliable expert opinion sufficient to fulfill requirements of Fed. R. Evid. 702. Kallassy v Cirrus Design Corp. (2008, CA5 Tex) 265 Fed Appx 165, CCH Prod Liab Rep P 17936.

Unpublished: District court did not abuse its discretion in permitting medical experts to testify; studies on which they relied demonstrated relationship between deployments of electronic control devices and blood acid levels that could be aggravated by additional factors at play in case, such as numerosity and duration of deployments and victims' already-enhanced oxygen needs and blood acid levels. Heston v Taser Int'l., Inc. (2011, CA9 Cal) 431 Fed Appx 586.

47.--Other particular cases

Given physician's medical education and work experience as physician and nurse in U.S. and abroad and her experience with trauma victims, she was qualified to comment on alien's physical trauma, scars, and symptoms and their consistency with his torture claims; therefore, immigration judge denied alien fair hearing by excluding affidavit of physician. Naing Tun v Gonzales (2007, CA8) 485 F3d 1014.

Shooting victim argued that admission of trauma doctor's testimony about victim's ability to throw gun or crawl after he was shot was erroneous because he was not expert in biomechanics or orthopedic surgeon; however, trauma doctor testified as to physical abilities of victim at time he treated him, and as judge held, this type of knowledge is standard to all doctors, and doctor was qualified to testify. Banister v Burton (2011, CA7 Ill) 636 F3d 828, 84 Fed Rules Evid Serv 925.

Osteopath, who had observed lumbar fusion surgery using implanted instrumentation during his residency, but had not participated in any surgery to implant or remove spinal implants in last 13 years, was qualified to testify as expert witness in products liability action against manufacturer of orthopedic bone screws. McCollin v Synthes Inc. (1999, DC Utah) 50 F Supp 2d 1119.

Smoker's treating physician was qualified under Rule 702 to testify in smoker's products liability action against cigarette manufacturer that smoker suffered from peripheral vascular disease (PVD) caused by smoking, even though doctor's area of expertise was rehabilitation therapy, and she had not published articles on subject of PVD, where physician was involved in diagnosis and treatment of smoker's case of PVD. Burton v R.J. Reynolds Tobacco Co. (2002, DC Kan) 183 F Supp 2d 1308, CCH Prod Liab Rep P 16258, 58 Fed Rules Evid Serv 345.

Where injured party's medical expert was to testify as to standard of care in diagnosing injured party's myocardial infarction, and injured party was anesthesiologist, not cardiologist, expert qualified as expert and testimony was admissible under Fed. R. Evid. 702, but evidence was given less weight than it would have been given had expert been cardiologist. McGraw v United States (2003, DC Puerto Rico) 254 F Supp 2d 242.

Expert was qualified to render expert testimony on Multi Traumatic Brain Injury (MTBI) where fact that expert was not neurologist or physician did not resolve whether she was qualified to render expert testimony on MTBI and American Psychological Association stated that neurological examinations were very limited in their capacity to detect brain damage, and that neuropsychological testing was only means of diagnosing some forms of brain damage; moreover, to qualify as MTBI expert, expert did not need to have conducted research nor written articles on MTBI since record in case showed that expert was sufficiently experienced, trained, and educated to render expert testimony on MTBI; therefore, manufacturer's motion in limine to exclude expert's testimony was denied. Bado-Santana v Ford Motor Co. (2007, DC Puerto Rico) 482 F Supp 2d 192.

Doctor's testimony was inadmissible pursuant to Fed. R. Evid. 702 because it stemmed from belated 15-minute examination of plaintiff, during which no diagnosis was formed; also, while defendants sought to exclude testimony of plaintiff and his wife pursuant to Fed. R. Evid. 701, they could testify about plaintiff's injuries, his symptoms, and his pain, but they could not testify as to doctor's post-deposition diagnosis. Hrichak v Pion (2007, DC Me) 498 F Supp 2d 380.

In personal injury action, orthopedic surgeon's testimony as to disability was reliable; his disability rating was reliable because it was derived from reliable source and because fact that patients suffered some disability following spinal surgery was generally accepted among orthopedic surgeons, and it fell within purview of opinions that orthopedic surgeon would have been expected to offer. Bowers v Norfolk S. Corp. (2007, MD Ga) 537 F Supp 2d 1343, affd (2008, CA11 Ga) 300 Fed Appx 700.

Court denied widow's motion to exclude expert witness's testimony on ground that expert had no expertise in making clinical assessments, writing FDA-compliant drug labels, suicidology, or pharmacovigilance practices because: expert's opinions all arose directly from her area of undisputed expertise, pharmacoepidemiological analysis; nothing in witness's analysis required her to exercise any kind of clinical judgment or required that she possess expertise in suicidology or Food and Drug Administration labeling; and manufacturers did not plan to have expert testify regarding adequacy of manufacturers' pharmacovigilance practices or conduct; moreover, decision regarding search terms did not require any special expertise in suicidology, and because widow could have simply recreated expert's searches, that provided no basis to exclude her testimony. Smith v Pfizer, Inc. (2010, MD Tenn) 714 F Supp 2d 845, 82 Fed Rules Evid Serv 564.

IV.PARTICULAR EXPERTS AND CASES

H.Medical and Health Matters

268. Birth-related injuries

Defendant physician was properly permitted to testify as to possible causes of brachial plexus injuries in general and newborn's injuries in particular since testimony assisted jury in global understanding of brachial plexus injuries, and testimony admitted that defendant could have caused newborn's injuries but could not say with reasonable degree of medical probability what, from range of possibilities, caused them. Clark by & Through Clark v Heidrick (1998, CA8 Neb) 150 F3d 912, 49 Fed Rules Evid Serv 1236.

District court abused its discretion in admitting testimony of expert on causation of child's cerebral palsy as birth asphyxia since expert had no background in studying causes of cerebral palsy, and thus was not equipped to address specific question whether it was more likely than not that baby's symptoms developed cerebral palsy as result of hospital's negligent treatment of her birth asphyxia or, as hospital argued, congenital defects. Tanner v Westbrook (1999, CA5 Miss) 174 F3d 542, 51 Fed Rules Evid Serv 1543, reh, en banc, den (1999, CA5) 192 F3d 128.

Medical expert is not precluded from testifying as to causation simply because he lacks precise details on plaintiff's exposure or specific information concerning exposure necessary to cause specific harm to humans or fetuses, however, expert's conclusions regarding causation must have basis in established fact and cannot be premised on mere suppositions or, if based on assumed facts, there must be some basis for assumptions in record; in order to be admissible on issue of causation, expert's testimony need not eliminate all other possible causes of injury, and fact that several possible causes might remain "uneliminated" goes to accuracy of conclusion and not to soundness of methodology and, similarly, weaknesses in factual basis of expert witness' opinion bear on weight of evidence rather than on its admissibility. Asad v Cont'l Airlines, Inc. (2004, ND Ohio) 314 F Supp 2d 726.

Where child suffered stroke during birth and expert proposed to testify that doctor's inappropriate use of vacuum caused injury, expert's testimony was excluded because opinion was mere speculation, not supported by reliable scientific knowledge since (1) expert had to do more than merely assert that causal link between stroke and vacuum delivery was "well-established," (2) conclusion was developed expressly for purposes of testifying, and (3) expert failed to eliminate other possible causes for stroke. McGovern v Brigham & Women's Hosp. (2008, DC Mass) 584 F Supp 2d 418.

Where patient's child had brachial plexus injury at birth, patient's medical negligence claim failed because, inter alia, (1) opinion of patient's expert that proper performance of maneuvers in question would prevent brachial plexus injury was not supported by scientific evidence presented, and (2) expert's report provided no recognizable support for proposition that induction contributed to baby's injury. Madrigal v Mendoza (2009, DC Ariz) 639 F Supp 2d 1026.

273. Federal Tort Claims Act

Summary judgment for defendants on plaintiff's medical malpractice action under Federal Tort Claims Act was reversed and remanded because district court abused its discretion and invaded province of expert by requiring texts to state precise type of harm explained by specialized testimony of medical expert and, even if district court had not abused its discretion by misapprehending evidence, it applied inappropriately rigid Daubert standard to medical expert testimony; expert's opinion that abnormally long back operation substantially increased risk of complications including wound infection and skin necrosis appeared to be relevant to case, and its reliability appeared to be supported by four textbooks to which expert referred. Sullivan v United States Dep't of Navy (2004, CA9 Cal) 365 F3d 827, 64 Fed Rules Evid Serv 91.

In wrongful death suit under Federal Tort Claims Act, expert's testimony concerning alleged breaches of standard of care did not qualify as substantive evidence because his statements contradicted themselves, were unsupported by any data, or were incorrect factual assumptions based on his examination of incomplete records. Guile v United States (2005, CA5 Tex) 422 F3d 221.

Expert testimony on behalf of federal tort claim plaintiffs allegedly poisoned by lidocaine injections as infants at Air Force hospital is admissible, even though expert admits there are no clinical studies which conclusively establish that exposure of neonates to toxic doses of lidocaine causes long-term health effects, where expert is doctor who has extensive experience with neurological disorders and knowledge of central nervous system, who has gathered medical information about plaintiffs, and who has researched effects and chemistry of lidocaine exposure, because it would be truly unjust to preclude plaintiffs' recovery simply because no deviant person previously has attempted to poison infants with lidocaine. Gess v United States (1997, MD Ala) 991 F Supp 1332.

In federal tort claim under Federal Tort Claims Act, 28 USCS §§ 2671 et seq., related to injuries sustained by plaintiff following automobile accident with U.S. Army recruiter, expert opinion of plaintiff's treating physician was given greater weight and credibility than testimony of defense medical expert on issue of actual and proximate cause of osteonecrosis in plaintiff's right knee; defense expert acknowledged that in theory person's treating physician would be in best position to give opinion regarding onset and development of osteonecrosis and that in practice, plaintiff's treating physician's medical opinions were entitled to greater weight because her treating physician actually observed plaintiff's right knee joint during her total knee replacement surgery. Shaver v United States (2004, MD NC) 319 F Supp 2d 649.

279. Medical malpractice, generally

Experts were properly permitted to testify in medical malpractice action as to proper treatment for patients on anticoagulant medication who were scheduled to undergo colonoscopies since testimony was relevant; fact that one expert was not specialist in gastroenterology did not render his opinion unreliable, since specific testimony offered was within witness's area of expertise, and other expert's reliance on pathologist's report, which allowed him to study nature of incisions made by defendants in course of biopsy, was at least as reliable as basis for his opinion as reports prepared by treating physicians. Mitchell v United States (1998, CA1 Mass) 141 F3d 8, 49 Fed Rules Evid Serv 502.

With respect to admission of plaintiffs' expert's testimony in medical malpractice action against hospital, district court considered expert's professional credentials and ascertained that he had been admitted as expert on rehabilitation and life-care planning in numerous state and federal courts before accepting him as expert; although expert's report might have benefited from physician's review of projections regarding baby's future needs, district court did not abuse its discretion in determining that expert's methodology was sufficiently reliable for admissibility under Fed. R. Evid. 702. Rivera v Turabo Med. Ctr. P'ship (2005, CA1 Puerto Rico) 415 F3d 162, 67 Fed Rules Evid Serv 931, cert den (2006) 546 US 1172, 126 S Ct 1318, 164 L Ed 2d 52.

District court did not abuse its discretion when it admitted expert's testimony because expert's extensive investigation of records and reports fulfilled sufficient facts or data requirement, expert's reliance on reports prepared by others was plainly justified in light of custom and practice of medical profession and it was unrealistic to expect physician, as condition precedent to offering opinion testimony in personal injury case, to have performed every test, procedure, and examination himself; moreover, expert testified that orthopedists customarily formed opinions based on medical reports rather than seeking to verify independently underlying primary evidence, and given that testimony, district court was fully entitled to conclude that use of x-ray and MRI reports by witness had reliable basis in experience of medical profession; further, Fed. R. Evid. 703 authorized experts to rely on materials compiled by others as long as those materials were of type reasonably relied upon by experts in particular field. Crowe v Marchand (2007, CA1 RI) 506 F3d 13, 74 Fed Rules Evid Serv 1178.

In this medical malpractice action, district court did not abuse its discretion when it allowed testimony of defendants' medical expert where (1) expert was board certified general surgeon with extensive academic--including teaching--and professional experience; and (2) expert testified that he was experienced in open and laparoscopic hiatal hernia repair procedures and had performed both. Allen v Brown Clinic, P.L.L.P. (2008, CA8 SD) 531 F3d 568.

Plaintiff/physician suing for medical malpractice resulting in death of his mother would be permitted to testify as expert as well as plaintiff; defendants would have adequate opportunity to bring plaintiff's obvious bias to attention of jury for its evaluation. Douglas v University Hosp. (1993, ED Mo) 150 FRD 165, 38 Fed Rules Evid Serv 1387, affd without op sub nom Douglas v St. Louis Univ. (1994, CA8 Mo) 34 F3d 1070, reported in full (1994, CA8 Mo) 1994 US App LEXIS 23497.

In wrongful death and malpractice action brought by decedent's wife alleging that defendants, physicians and their professional corporation, were negligent in their care and treatment of decedent while he was under their care for pneumonia, and caused decedent's death when they failed to diagnose pulmonary embolism, court denied defendants' motion to preclude wife's first expert from opining on clinical diagnosis and treatment issues, including standard of care for family medicine physicians, or opining as to diagnosis of Alzheimer's Disease, as being outside of his area of expertise, because § 512(c) of Pennsylvania's Medical Care Availability and Reduction of Error Act, 40 Pa. Stat. Ann. § 1303.512(c), which was applicable to case under Fed. R. Evid. 601, did not preclude expert's testimony as he did not offer any opinion on standard of care issues and would not testify that defendants deviated from any accepted standard of care, and expert's testimony also was not precluded under Fed. R. Evid. 702, 104(a) because (1) his broad range of knowledge, skills, and training in areas of clinical, family medicine and neuropathology qualified him as expert, despite his lack of specialty; (2) he regularly reviewed pathological data in his internal medicine practice, thereby rendering his testimony within his expertise; and (3) based on his professional experience, training, and expertise as pathologist, his testimony was reliable because it relied on good grounds. Keller v Feasterville Family Health Care Ctr. (2008, ED Pa) 557 F Supp 2d 671, 76 Fed Rules Evid Serv 844.

In wrongful death and malpractice action brought by decedent's wife alleging that defendants, physicians and their professional corporation, were negligent in their care and treatment of decedent while he was under their care for pneumonia, and caused decedent's death when they failed to diagnose pulmonary embolism, court denied defendants' motion to preclude wife's second expert from testifying about interpretation of neuropathology or diagnosis of Alzheimer's disease, and impact of diagnosis on life expectancy, as being outside of his area of expertise, because § 512(d) of Pennsylvania's Medical Care Availability and Reduction of Error Act, 40 Pa. Stat. Ann. § 1303.512(d), which was applicable to case under Fed. R. Evid. 601, did not preclude expert's testimony as § 512(d) was limited to expert testimony on standard of car issues, and defendants did not challenge expert's testimony in that regard, and expert's testimony also was not precluded under Fed. R. Evid. 702, 104(a) because his broad range of knowledge, skills, and training in areas of geriatric medicine and Alzheimer's disease patients qualified him as expert, despite his lack of specialty, and based on his professional experience and training, his testimony was reliable because it relied on good grounds. Keller v Feasterville Family Health Care Ctr. (2008, ED Pa) 557 F Supp 2d 671, 76 Fed Rules Evid Serv 844.

In wrongful death and malpractice action brought by decedent's wife alleging that defendants, physicians and their professional corporation, were negligent in their care and treatment of decedent while he was under their care for pneumonia, and caused decedent's death when they failed to diagnose pulmonary embolism, court denied wife's motion in limine to preclude opinion of defendants' second expert citing specialist's opinion that pulmonary emboli found at autopsy were insufficient to represent cause of death and adopting it as his own, opining that it was highly possible that decedent developed cardiac dysrythmia due to hypertensive and or ischemic cardiomyopathy which led rapidly to his demise, and opining that it was likely that decedent was in early stages of Alzheimer's and had he lived would likely have progressed to more advanced stages in years ahead, because (1) second expert's opinion was admissible under Fed. R. Evid. 702, 104(a), as it was reliable and did not lack foundation because it was based on "methods and procedures of science," which established good grounds for his opinion, and was stated with reasonable degree of medical certainty; (2) second expert's reliance on specialist's testimony was permissible under Fed. R. Evid. 703; (3) second expert's opinion was based on his review of medical records and numerous other sources of information, his experience regularly reviewing pathology reports for his practice, and his experience in family medicine; and (4) there was no basis to exclude second expert's testimony regarding Alzheimer's disease under Fed. R. Evid. 403 as there was no danger of unfair prejudice or jury confusion, and any arguable unfair prejudice does not substantially outweigh probative value of his opinion, which was helpful to jury, and wife had myriad options to challenge, limit, and discount testimony. Keller v Feasterville Family Health Care Ctr. (2008, ED Pa) 557 F Supp 2d 671, 76 Fed Rules Evid Serv 844.

In wrongful death and malpractice action brought by decedent's wife alleging that defendants, physicians and their professional corporation, were negligent in their care and treatment of decedent while he was under their care for pneumonia, and caused decedent's death when they failed to diagnose pulmonary embolism, court granted in part wife's motion in limine to preclude defendants' third expert from testifying regarding any condition of alcoholism, diabetes, or obesity because no evidence existed suggesting that decedent had such conditions, and third expert

could not reliably apply his methodology to facts of case under Fed. R. Evid. 702, 104(a); court denied wife's motion in limine to preclude third expert from testifying as to cause of death because his opinion was based on his review of medical records and numerous other sources of information including pathological evidence, his experience as pathologist who regularly considered medical histories and pathological evidence to determine cause of death, and his board certification in anatomic and clinical pathology, and there was no basis to exclude his testimony regarding Alzheimer's disease or cause of death under Fed. R. Evid. 403 as foundations underlying third expert's opinion were reliable, he stated his opinion to reasonable degree of medical certainty, his opinion was helpful to jury, and wife had myriad options to challenge, limit, and discount testimony. Keller v Feasterville Family Health Care Ctr. (2008, ED Pa) 557 F Supp 2d 671, 76 Fed Rules Evid Serv 844.

In wrongful death and malpractice action brought by decedent's wife alleging that defendants, physicians and their professional corporation, were negligent in their care and treatment of decedent while he was under their care for pneumonia, and caused decedent's death when they failed to diagnose pulmonary embolism, court denied wife's motion in limine to preclude opinion of defendants' first expert regarding decedent's post-autopsy diagnosis of Alzheimer's disease and decedent's future with disease because (1) first expert's opinion was admissible under Fed. R. Evid. 702, 104(a), as process used in formulating and applying his opinion was reliable, and he stated such opinion to reasonable degree of medical certainty; (2) any weaknesses or inadequacies with facts and assumptions of first expert's conclusions could be highlighted through effective cross-examination; (3) first expert's testimony would not be excluded as speculative or confusing under either Fed. R. Evid. 403 or 702 because whether decedent had Alzheimer's disease and effect of disease on his future was relevant to issue of damages under Fed. R. Evid. 401, and there was no chance jury could be confused or misled by first expert's testimony as there was nothing particularly confusing about testimony, but to extent such possibility might exist, it did not substantially outweigh probative value of evidence's impact on helping jury quantify damages. Keller v Feasterville Family Health Care Ctr. (2008, ED Pa) 557 F Supp 2d 671, 76 Fed Rules Evid Serv 844.

In wrongful death and malpractice action brought by decedent's wife alleging that defendants, physicians and their professional corporation, were negligent in their care and treatment of decedent while he was under their care for pneumonia, and caused decedent's death when they failed to diagnose pulmonary embolism, court denied wife's motion to preclude opinion of defendants' fourth expert quoting and adopting specialist and stating that decedent might have had pulmonary embolism only incidentally found on autopsy and not cause of death because (1) fourth expert's opinion was admissible under Fed. R. Evid. 702, 104(a) because it was reliable and did not lack foundation was it was based on his review of medical records and reports as well as his experience reviewing pathology reports, his professional experience in internal medicine, and his medical training; (2) even if fourth expert merely relied on specialist's testimony, such reliance was proper under Fed. R. Evid. 703 because physician's generally relied on specialist's interpretation of data; and (3) although fourth expert was internal medicine physician and not pathologist, he regularly reviewed pathological data in his internal medicine practice, so his testimony was reliable and not outside scope of his expertise. Keller v Feasterville Family Health Care Ctr. (2008, ED Pa) 557 F Supp 2d 671, 76 Fed Rules Evid Serv 844.

In medical malpractice suit based on patient's death from stroke after receiving dental care, widow established that testimony of particular expert was reliable because expert had extensive experience in working and teaching in field for more than 37 years, including how to respond to dental emergencies, and witness offered reasonable explanation for his disagreement with particular relevant medical literature; testimony was also relevant because expert's opinion concerned general standard of care for medical malpractice case. Ellison v United States (2010, ED Pa) 753 F Supp 2d 468, 84 Fed Rules Evid Serv 27.

In medical malpractice suit based on patient's death from stroke after receiving dental care, widow's neurologist expert was permitted to testify as expert on causation because she established that opinion was reliable since expert properly established reasons why particular tests were not performed on decedent, including why certain "TOAST" criteria were not applicable to this particular situation. Ellison v United States (2010, ED Pa) 753 F Supp 2d 468, 84 Fed Rules Evid Serv 27.

Unpublished Opinions

Unpublished: In medical malpractice case brought by parents of deceased infant, district court properly excluded testimony by parents' expert that chylous effusions suffered by infant were caused by manner in which physician performed procedure; expert's testimony was not supported by reference to any scientific data or texts and did not satisfy reliability requirement of Fed. R. Evid. 702. Reger v A.I. Dupont Hosp. for Children of Nemours Found. (2008, CA3 Pa) 259 Fed Appx 499, decision reached on appeal by (2010, CA3 Pa) 599 F3d 285.

Unpublished: Because expert simply asserted doctor's breast biopsy needle punctured patient's chest wall, heart, pericardium, or blood vessels, without evidentiary basis for that assertion under Fed. R. Evid. 702(1), as technician testified needle never came close to chest wall, expert's testimony was properly excluded. Matosky v Manning (2011, CA5 Tex) 428 Fed Appx 293, 85 Fed Rules Evid Serv 642.

281. Nurses

Doctors were not entitled to new trial on individual's negligence claim based on their objection to nurse's expert testimony where nurse had requisite experience and knowledge in rehabilitation nursing and testimony regarding types of treatment that individual could have expected to receive from doctors in future was well within nurse's ken as rehabilitation expert. Corrigan v Methodist Hosp. (2002, ED Pa) 234 F Supp 2d 494, affd (2004, CA3 Pa) 107 Fed Appx 269.

287. Standard of care

To be considered reliable under Daubert standard, expert medical witness does not have to demonstrate familiarity with accepted medical literature or published standards in other areas of specialization in order to testify as to standards of care applicable to those areas: (1) concern with keeping courtroom door closed to junk science is not served by excluding testimony that is supported by extensive relevant experience; (2) medical expert's extensive experience in other areas of specialization is generally sufficient to render his or her testimony reliable at to those areas under Fed. R. Evid. 702; and (3) there is no requirement that medical expert must cite published studies in order to reliably conclude that particular object or set of circumstances caused particular illness or medical condition, and any lack of textual support goes to weight, not admissibility, of expert's testimony. Dickenson v Cardiac & Thoracic Surgery of E. Tenn, P.C. (2004, CA6 Tenn) 388 F3d 976, cert den (2005) 544 US 961, 125 S Ct 1731, 161 L Ed 2d 602 and cert den (2005) 544 US 961, 125 S Ct 1731, 161 L Ed 2d 602.

In wrongful death suit under Federal Tort Claims Act, expert's testimony concerning alleged breaches of standard of care did not qualify as substantive evidence because his statements contradicted themselves, were unsupported by any data, or were incorrect factual assumptions based on his examination of incomplete records. Guile v United States (2005, CA5 Tex) 422 F3d 221.

Doctor is qualified to testify as expert witness and to offer his opinions on whether defendants met applicable standard of care in treating suicide patient, where he is emergency medical physician and has experience and training in treating patients admitted for self-inflicted gunshot wounds as well as infections, because his testimony will assist trier of fact in understanding evidence and determining fact in issue. Latshaw v Mt. Carmel Hosp. (1999, DC Kan) 53 F Supp 2d 1133.

Although patient's expert nurse in medical malpractice action may have been qualified to testify as to what is breach of nurse's duty of care, she was not qualified, under Rule 702, to testify on whether breach caused patient's injury as that was medical diagnosis that was outside of her area of expertise. Elswick v Nichols (2001, ED Ky) 144 F Supp 2d 758, 50 FR Serv 3d 103, affd (2002, CA6 Ky) 50 Fed Appx 193 and (criticized in Williams v Eighth Judicial Dist. Court of Nev. (2011, Nev) 262 P3d 360, 127 Nev Adv Rep 45).

In patient's suit to recover damages from laboratory for nerve damage sustained by patient when she had blood drawn by employee of laboratory, testimony offered by patient's expert witness was not stricken pursuant to Fed. R. Evid. 702; expert had 18 years experience in teaching phlebotomy and 17 years experience in running vocational school that trained phlebotomists, and expert had written phlebotomy textbook; thus, expert was well qualified to opine that laboratory was negligent in its hiring and retention of employee whose basic training did not meet current standards by which phlebotomists had to be judged to protect public. Wilkerson v Lab. Corp. of Am. Holdings (2005, ED Pa) 67 Fed Rules Evid Serv 975.

Even assuming that patient's expert was qualified to testify about causation of patient's injuries, elements of his expert report and deposition testimony concluding that surgeon departed from applicable standard of care failed Daubert reliability test; expert report was not based on patient's own sworn testimony concerning his conversation with surgeon, and it contained no opinion concluding that, based on patient's or defendants' version of events, surgeon committed malpractice. Berk v St. Vincent's Hosp. & Med. Ctr. (2005, SD NY) 380 F Supp 2d 334.

288.--Medical malpractice

Trial court did not err in refusing to exclude medical malpractice defendant's expert's testimony because expert refused to base his testimony on single medical textbook or journal article; expert was qualified to give expert opinion on standard of medical care owed to plaintiff's decedent, his testimony was based on 30 years' experience as practicing, board-certified cardiologist, on his review of decedent's medical records and coroner's records, and on broad spectrum of published material. Carroll v Morgan (1994, CA5 Miss) 17 F3d 787, 39 Fed Rules Evid Serv 328, reh, en banc, den (1994, CA5 Miss) 26 F3d 1117.

In medical malpractice action, trial court abused its discretion in excluding testimony of expert medical witness, who testified that defendant doctor violated applicable standard of care by administering drug sublingually to decedent patient as pretreatment for angioplasty; there was no dispute that expert's testimony was based in part on his considerable professional experience, including advising interventional cardiologists during surgical procedures, so his testimony regarding standard of care was reliable, even if literature he cited was irrelevant. Schneider v Fried (2003, CA3 Pa) 320 F3d 396, 60 Fed Rules Evid Serv 781, 55 FR Serv 3d 245.

Summary judgments entered in medical malpractice suit were reversed as to pulmonologist because district court abused its discretion when it excluded plaintiff's experts from testifying with regard to standard of care applicable to extubation of post-surgical patients in Tennessee; district court applied incorrect legal standard when it excluded testimony of Wisconsin cardiac surgeon, who was experienced with regard to making extubation decisions but failed to demonstrate familiarity with accepted pulmonology literature and ventilating equipment itself; witness's extensive experience rendered his testimony sufficiently reliable under Daubert standard. Dickenson v Cardiac & Thoracic Surgery of E. Tenn, P.C. (2004, CA6 Tenn) 388 F3d 976, cert den (2005) 544 US 961, 125 S Ct 1731, 161 L Ed 2d 602 and cert den (2005) 544 US 961, 125 S Ct 1731, 161 L Ed 2d 602.

Medical malpractice plaintiff cannot compel doctor who treated automobile accident victim to answer questions pertaining to alleged malpractice of victim's other treating physicians, where answering would require (1) greater knowledge of victim's particular case than doctor would have obtained during his treatment of victim, as well as (2) knowledge of type of care that should have been provided under circumstances, because mere fact that doctor is physician does not qualify him under FRE 702 to render expert testimony on malpractice issue without further study, which plaintiff cannot compel him to perform. Reed v Fetherston (1992, ED Wis) 785 F Supp 1352 (criticized in Burnett v Alt (In re Alt v Cline) (1999) 224 Wis 2d 72, 589 NW2d 21).

Dermatologist was properly authorized to testify as expert standard-of-care witness in plastic surgery malpractice case under FRE 702, even though he was not plastic or reconstructive surgeon and had never personally used Bioplastique, where he had performed numerous lip augmentations and other procedures using liquid silicone, because doctor, through his own experience and study in using silicone-based products for lip augmentation procedures, possessed specialized knowledge, skill, and expertise which jury may have found helpful. Nunley v Kloehn (1995, ED Wis) 888 F Supp 1483, 42 Fed Rules Evid Serv 895.

In medical malpractice case, injured party's expert was not qualified to testify as expert because: (1) expert admitted twice in her deposition that she did not know what applicable standard of care was; and (2) expert's testimony offered little more than reasonable possibility that deceased's ultimate death was proximately related to alleged failure to have her in restraints; thus, hospital's motion in limine seeking to exclude expert's testimony as to standard of care and proximate cause was properly granted. Smith v Am. Transitional Hosps. (2004, SD Ga) 330 F Supp 2d 1358, 34 ELR 20074.

Where inmate alleged medical malpractice and negligence against county, jail medical personnel, medical lab, and lab personnel, these defendants successfully moved to exclude testimony of expert in correctional health on basis of O.C.G.A. § 24-9-67.1, because expert was not qualified to testify as to any matter outside correctional health care--specifically, standard of care in fields of internal medicine, infectious disease, or laboratory procedures with regard to arrestee's state law claims. Furthermore, expert's testimony was neither relevant nor reliable under Daubert analysis, and therefore, it was excluded pursuant to Fed. R. Evid. 702. Dukes v State (2006, ND Ga) 428 F Supp 2d 1298, affd (2006, CA11 Ga) 212 Fed Appx 916.

Unpublished Opinions

Unpublished: In medical malpractice action arising from physician's treatment of patient's abdominal pain, district court properly allowed testimony of general surgeon under Fed. R. Evid. 702 as to standard of care; general surgeon did not stray from his area of expertise, and Wyo. Stat. Ann. § 1-12-601 did not suggest per se rule that only board-certified specialist such as gastroenterologist could provide testimony against another board-certified specialist. Poche v Joubran (2010, CA10 Wyo) 389 Fed Appx 768, subsequent app (2011, CA10 Wyo) 644 F3d 1105.

289. Surgery

In Medicaid claimant's trial claiming that state human services department violated Medicaid requirements when it refused final surgical procedure for his gender identity disorder, district court did not err in restricting expert's testimony to general psychiatric principles and basic diagnostic criteria and excluding his opinions concerning effectiveness and necessity of sex reassignment surgery in general and claimant in particular; although expert had treated several patients with sexual disorders, he had examined only one patient with gender identity disorder and that occurred eight years prior to trial. Smith v Rasmussen (2001, CA8 Iowa) 249 F3d 755, 74 Soc Sec Rep Serv 20, 56 Fed Rules Evid Serv 1369, reh den, reh, en banc, den (2001, CA8) 2001 US App LEXIS 18767.

Patient's expert testified that lengthy malleting in hip replacement surgery was cause of fat embolism syndrome (FES) which resulted in patient suffering severe brain damage; relying both on report of court-appointed technical expert, and on its own assessment of FES theory of patient's expert and supporting materials, court found that theory did not rise to level of reliability required by Fed. R. Evid. 702 where there was no scientific or medical support for FES theory. Domingo v T.K. (2002, CA9 Hawaii) 289 F3d 600.

Unpublished Opinions

Unpublished: In case alleging claims for Jones Act negligence and unseaworthiness, district court did not err in not striking medical opinion of seaman's treating physician concerning seaman's injuries and need for surgery as unreliable under Fed. R. Evid. 702; doctor's opinions, which maritime employer controverted with opinions from its own expert, were based on his experience, training, and examination of seaman, as well as his evaluation of objective tests performed on seaman. Seymore v Penn Mar. Inc. (2008, CA5 Tex) 281 Fed Appx 300.

290.--Medical malpractice

In medical malpractice suit against surgeon, district court properly allowed internist with expertise in endocrinology who regularly treated patients whose small-bowel obstructions were relieved medically or through surgical intervention to testify about proper pre- and post-surgical treatment of patients with small-bowel obstructions; expert did not offer testimony regarding technical aspects of surgical procedure. Sosna v Binnington (2003, CA8 Mo) 321 F3d 742, 60 Fed Rules Evid Serv 925.

Summary judgment for defendants on plaintiff's medical malpractice action under Federal Tort Claims Act was reversed and remanded because district court abused its discretion and invaded province of expert by requiring texts to state precise type of harm explained by specialized testimony of medical expert and, even if district court had not abused its discretion by misapprehending evidence, it applied inappropriately rigid Daubert standard to medical expert testimony; expert's opinion that abnormally long back operation substantially increased risk of complications including wound infection and skin necrosis appeared to be relevant to case, and its reliability appeared to be supported by four textbooks to which expert referred. Sullivan v United States Dep't of Navy (2004, CA9 Cal) 365 F3d 827, 64 Fed Rules Evid Serv 91.

In medical malpractice case resulting from patient's postoperative blindness, court declined to exclude testimony by two plaintiffs' experts; one witness's testimony that patient's blindness was caused by ischemic optic neuropathy (ION) was not unreliable even if occurrence of ION was rare and multifactorial, and other witness's testimony fell within scope of order restricting further expert disclosure to issue of res ipsa loquitur. McElroy v Albany Mem. Hosp. (2004, ND NY) 332 F Supp 2d 502.

In husband's suit asserting claims of negligence and wrongful death against U.S. in connection with wife's death after surgery in hospital operated by U.S.husband's failure to designate wife's treating physician as expert witness did not did not result in exclusion of physician's testimony under Fed. R. Civ. P. 26(a)(2)(B), 37(c)(1) because physician was treating doctor, not witness under Fed. R. Evid. 702 who was being called just to offer expert testimony, and husband and his attorney did not appear to have acted in bad faith in failing to disclose physician before close of discovery. Vaughn v United States (2008, SD Ga) 542 F Supp 2d 1331.

Treating physician's deposition testimony, which discussed and compared treatment and recovery of amputation versus limb salvage surgery patients, was inadmissible under Fed. R. Evid. 702 because that testimony was never directly linked to treatment and recovery of amputation patient, who sued surgeon and medical center after his leg was amputated following motorcycle accident; testimony clearly qualified as expert testimony within scope of R. 702 because it was highly specialized, but it was not admissible as expert testimony because physician made clear that he was describing general principles, that each medical case differed, and that his testimony did not reflect any of patient's particular medical issues or experiences. Trout v Milton S. Hershey Med. Ctr. (2008, MD Pa) 576 F Supp 2d 673, 77 Fed Rules Evid Serv 713.

In this medical negligence action, plaintiffs' expert's opinions were not reliable to extent required under federal and Delaware law, which required opinions to be stated "to reasonable degree of medical certainty" because although expert had opined that "people believed" that arterial or venous pressures were linked to pleural effusions, he had not stated which "people" held such belief. Daddio v A.I. duPont Hosp. for Children (2009, ED Pa) 650 F Supp 2d 387, 80 Fed Rules Evid Serv 482, motion den sub nom Svindland v Nemours Found. (2009, ED Pa) 2009 US Dist LEXIS 74944 and affd (2010, CA3 Pa) 399 Fed Appx 711.

In medical malpractice cases stemming out of open-heart surgeries performed on young infants, expert's opinion that insufficient cooling time and prolonged cardiac arrest period during hemi-Fontan procedures were but for causes of infants' deaths was admissible under Fed. R. Evid. 702 because expert's opinion was supported by medical literature and expert reviewed infants' medical records in depth and drew his conclusions based on facts in

record. Madden v A.I. Dupont Hosp. for Children of Nemours Found. (2010, ED Pa) 264 FRD 209, 81 Fed Rules Evid Serv 525.

293. Treatment

Inmate's medical expert's contention that inmate's paralysis could have been prevented or limited had he not had to wait 24 hours for treatment failed under Daubert because expert could not identify any empirical data to support his theory, except for one study which dealt with delay of 48 hours, which was more than twice delay that was at issue. McDowell v Brown (2004, CA11 Ga) 392 F3d 1283, 18 FLW Fed C 92.

Expert testimony that patient's overdose resulted from medication prescribed by defendant and that as to second patient, prescription from defendant "directly and causally contributed," such that if it had not been for that prescription, second patient would not have overdosed, was properly admitted under Fed. R. Evid. 702 because it was based on expert's examination of toxicology reports and patients' files, and jury was instructed to consider whether "course of treatment" proximately caused deaths of patients, not simply whether oral prescriptions themselves resulted in their deaths; further, given evidence from which rational jury could find that defendant's "course of treatment" proximately caused deaths of patients, any error in admitting expert's testimony was harmless. United States v Martinez (2009, CA6 Ohio) 588 F3d 301, 2009 FED App 410P, reh, en banc, den (2010, CA6) 2010 US App LEXIS 7925 and cert den (2010, US) 131 S Ct 538, 178 L Ed 2d 395, reh den (2011, US) 131 S Ct 990, 178 L Ed 2d 819.

In wrongful death action brought by executor of prisoner's estate against jail nurses and officials, district court improperly excluded executor's medical expert's opinion that jail nurses' failure to quell prisoner's vomiting could have led to her tachycardia and subsequent death, as expert's medical training, examination of prisoner's medical records, and use of differential diagnosis supported his conclusion; likewise, expert's examination of record, coupled with being one of leading experts on prison medical care. supported his conclusion that jail officials did not provide prisoner with minimum standard of prison medical care expected in United States, and should have been admitted. Gayton v McCoy (2010, CA7 Ill) 593 F3d 610, 81 Fed Rules Evid Serv 538, reh den (2010, CA7 Ill) 2010 US App LEXIS 8951.

In medical malpractice action in which plaintiff claimed that defendants were negligent in not giving him intravenous shot of tissue plasminogen activator (t-PA), district court did not abuse its discretion in determining that testimony of plaintiff's medical expert was not admissible because results of expert's statistical analysis did not sufficiently ground his conclusion that plaintiff's condition likely would have improved had t-PA been administered. Samaan v St. Joseph Hosp. (2012, CA1 Me) 670 F3d 21, 87 Fed Rules Evid Serv 435, 81 FR Serv 3d 548.

Doctors were not entitled to new trial on individual's negligence claim based on their objection to nurse's expert testimony where nurse had requisite experience and knowledge in rehabilitation nursing and testimony regarding types of treatment that individual could have expected to receive from doctors in future was well within nurse's ken as rehabilitation expert. Corrigan v Methodist Hosp. (2002, ED Pa) 234 F Supp 2d 494, affd (2004, CA3 Pa) 107 Fed Appx 269.

Although treating physician was not retained as expert by plaintiff, physician was deemed to be expert under Fed. R. Evid. 702 because physician's opinion regarding her treatment of plaintiff was based on her specialized knowledge in scheme of her duties as plaintiff's treating physician. Lamere v New York State Office for Aging (2004, ND NY) 223 FRD 85, affd (2004, ND NY) 2004 US Dist LEXIS 13217 and (criticized in McDermott v FedEx Ground Sys. (2007, DC Mass) 247 FRD 58) and (criticized in Hadley v Pfizer, Inc. (2009, ED Pa) 73 FR Serv 3d 1046).

Registered nurse's opinion and life care plan regarding injured plaintiff were admissible because plaintiffs showed that expert was qualified, that method employed by her in reaching her conclusions was scientifically sound, and that opinion was based on facts which sufficiently satisfied Fed. R. Evid. 702's reliability requirements; it was permissible for expert to rely on reports or information of other experts, and to have modified her opinion as further such information became available. North v Ford Motor Co. (2007, DC Utah) 505 F Supp 2d 1113.

Testimony did not establish critical fact that treating physician reached causation opinion in course of his treatment of his patient, and thus, physician was not shown to have formulated specific causation opinion; this bordered on finding that opinion would also be inadmissible under Fed. R. Evid. 702, and physician's willingness at his deposition to opine on cause of plaintiff's cancer appeared to be informed guess that had been found inadequate in other case law, such that plaintiff was required to disclose written report from physician under Fed. R. Civ. P. 26(a)(2)(B). Aurand v Norfolk S. Ry. Co. (2011, ND Ind) 802 F Supp 2d 950.

Veterinarian's opinion was sufficiently objective and reliable to survive summary judgment scrutiny where his

augmentation of original findings with supplemental report based on review of additional information did not automatically bar admission of testimony, he was experienced equine veterinarian, and his opinion was relevant to issues surrounding race horse's ailments and proper course of treatment. Simpson v Baronne Veterinary Clinic, Inc. (2011, SD Tex) 803 F Supp 2d 602.

Unpublished Opinions

Unpublished: On plaintiff widow's Emergency Medical Treatment and Active Labor Act, 42 USCS §§ 1395dd et seq., failure to stabilize claim against defendant medical center, widow's expert's conclusory statement, that medical center officials were not intending to stabilize patient or give proper treatment for initial emergency conditions, was so conclusory and unsupported by record evidence that it would not reasonably be of assistance to finder of fact and could not defeat medical center's motion for summary judgment. Morgan v N. Miss. Med. Ctr., Inc. (2006, SD Ala) 458 F Supp 2d 1341, affd (2007, CA11 Ala) 225 Fed Appx 828, reh den, reh, en banc, den (2007, CA11) 254 Fed Appx 803 and cert den (2008) 552 US 1098, 128 S Ct 888, 169 L Ed 2d 727.

IV.PARTICULAR EXPERTS AND CASES

D.Damages

208. Medical-related damages

Because plaintiffs' expert was experienced in treating burn patients and, through his experience, had sufficient facts and data to estimate medical expenses for burn victims, court allowed expert to testify about injured plaintiff's future medical expenses; expert was medical doctor, and his opinions were based on his expertise and evaluation of injured plaintiff, and fact that expert was not expert in life care planning and relied on actuarial tables in forming his opinion did not make his opinion inadmissible. Morales v E.D. Etnyre & Co. (2005, DC NM) 382 F Supp 2d 1273.

Psychologist's expert opinion as to damages was not reliable, as required by Fed. R. Evid. 702, within meaning of Daubert because he provided no independent diagnosis; instead, psychologist relied on incomplete information, did not include such information as complete medical and psychological history, and did not include pre-existing conditions such as early adolescent alcohol use by one plaintiff or post-accident events such as second car accident involving another plaintiff. North v Ford Motor Co. (2007, DC Utah) 505 F Supp 2d 1113.

Motion filed by brain-injured child's parent, seeking to bar testimony of sued railroad company's expert under Fed. R. Evid. 702, was denied because all of parent's objections went to weight and credibility of testimony and not reliability of methods or data that expert relied upon in developing his opinions; expert's opinions regarding child's future impairments and likely future medical needs were based upon sufficient review of facts, medical record, and literature, they were product of reliable principles and methods that were applied reliably to facts presented in case, and expert's testimony would assist jury in understanding facts and deciding case. Cimaglia v Union Pac. R.R. Co. (2008, CD Ill) 586 F Supp 2d 1039.

In medical malpractice suit regarding brain damage during child's birth due to blood infection, opinion of plaintiffs' expert regarding child's life expectancy satisfied requirements of Daubert and Fed. R. Evid. 702 because it was based on expert's extensive medical experience with cerebral palsy patients and others with severe brain injuries, review of child's medical records, visits with child and family, and examinations of child. Arroyo v United States (2010, ND Ill) 82 Fed Rules Evid Serv 250, affd (2011, CA7 Ill) 656 F3d 663.

In dispute over no-fault coverage, there was no basis to strike potential testimony of plaintiff's expert witness, vocational rehabilitation expert who appeared to be qualified, whose methodology was consistent with Michigan law, and whose expertise would have been helpful to jury, regarding value of wife's attendant care of plaintiff accident victim. Durmishi v Nat'l Cas. Co. (2010, ED Mich) 720 F Supp 2d 862.

Unpublished Opinions

Unpublished: In personal injury case, because trial court properly prevented expert from testifying about appellant's future medical and non-medical expenses, testimony of second expert, which was dependent on first expert's, was also properly excluded. McNamara v Kmart Corp. (2010, CA3 VI) 380 Fed Appx 148.