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3 No. 57
Timothy J. Hinlicky, &c.,
Appellant,
v.
David C. Dreyfuss, et al.,
Respondents.

Michael J. Hutter, for appellant.
Timothy J. Perry, for respondent Riverside Associates in Anesthesia, P.C.
Charles O. Ingraham, for respondent Dreyfuss.
Timothy Brennan, for respondent Frank.

KAYE, CHIEF JUDGE:

In October 1996, decedent Marie Hinlicky, age 71, underwent an endarterectomy to remove plaque buildup in her carotid artery. Though the surgery was completed successfully, she suffered a heart attack and died 25 days later. Plaintiff, as administrator of her estate,[1] brought this medical malpractice

[1] Plaintiff, Mrs. Hinlicky's son, is acting in his capacity as both the administrator of her estate and as executor of the estate of his father, William P. Hinlicky, who died during the course of this litigation.

action alleging negligence on the part of internist Robert O. Frank, surgeon David C. Dreyfuss and anesthesiologists Riverside Associates.

At the nine-day jury trial 16 witnesses testified: plaintiff and his brother; three nurses and a nonparty doctor who attended to Mrs. Hinlicky at the hospital; the three treating physicians; and seven medical expert witnesses. One question predominated: were defendants negligent in not obtaining a preoperative cardiac evaluation to insure that Mrs. Hinlicky's heart could tolerate the surgery? Dr. Gregory Ilioff, an anesthesiologist affiliated with Riverside, was the third of her physicians to testify as part of plaintiff's case-in-chief. During his cross-examination, Dr. Ilioff claimed he had followed a flowchart, or algorithm, in deciding to allow the surgery without the cardiac evaluation. The issue now before us is whether the Trial Court properly exercised its discretion in admitting the algorithm into evidence. We agree with the Appellate Division that it did.

A summary of the medical testimony which is most pertinent to the issue on appeal follows.

<u>Treating Doctors' Testimony</u>

Dr. Frank, an internist engaged in family practice, testified that he saw Mrs. Hinlicky approximately once a year starting in September 1984, primarily for treating her high blood pressure. In 1993, she complained of shortness of breath,

exhaustion and chest pain, which she believed began after shoveling heavy snow in her driveway. Dr. Frank ordered an electrocardiogram (EKG), which showed a benign condition resulting from her longstanding hypertension; he diagnosed and treated gastritis and gallstones, concluding that her heart was not at risk, and her symptoms improved. In 1995, he ordered a second EKG after she complained of discomfort in her left arm and chest. The result was similar to the earlier test, and Dr. Frank determined that her symptoms were not cardiac in nature. She reported that her symptoms cleared with hot soaks and Tylenol.

In August 1996, during a routine check-up, Mrs. Hinlicky reported that her sister recently had carotid artery surgery and her brother a heart bypass. Based on a physical examination, Dr. Frank testified that he grew concerned that she might have blockages in her carotid arteries, obstructing the blood-flow to her brain, and indeed an ultrasound test showed significant blockages in both. In a follow-up appointment, Dr. Frank concluded that occasional episodes of decreased vision in Mrs. Hinlicky's right eye were symptoms of a condition associated with the blocked carotid artery and he referred her to the larger, regional hospital for a surgical evaluation.

After his own examination and review of the ultrasound, Dr. Dreyfuss, a vascular surgeon, ordered a third EKG, a chest X-ray, blood tests and an angiogram revealing a 70-to-75 percent blockage of the left carotid artery and more mild blockage of the

right. He recommended an endarterectomy--an operation he had performed hundreds of times--and explained that without the surgery, she faced the possibility of a stroke. He testified that it was his practice to order invasive cardiology work-ups on patients who previously had heart attacks, open-heart surgery and episodes of congestive heart failure, but concluded that was unnecessary because Mrs. Hinlicky "had never had a heart attack, she was taking only a mild anti-[hyper]tensive medication, wasn't taking digoxin or medication to help her heart pump harder, didn't have . . . congestive heart failure, had a cardiogram that had been stable for a period of three years and didn't have any active chest pain." Dr. Dreyfuss did not order a stress test or angioplasty because, he testified, they presented risks that in her case had little likelihood of benefit or changing his prescribed therapy.

Dr. Ilioff, the anesthesiologist, testified that he reviewed Mrs. Hinlicky's medical history, her chart, the laboratory results, EKGs from 1995 and 1996, and two pre-operative nursing assessments, and that he examined and interviewed her. Specifically, he questioned her regarding potential coronary ischemia (lack of blood-flow to the heart) and assigned her a value of "three" on the American Society of Anesthesiologist's scale for surgery--meaning she had a severe systemic disease which he described as a blockage in the vessel

in her neck.[2] He explained that he decided not to send her for a preoperative cardiac evaluation based on the type of surgery involved, her history and her functional capacity.

After testifying at length concerning the steps leading to his decision not to refer Mrs. Hinlicky for preoperative cardiac testing, Dr. Ilioff noted that he had followed a set of clinical guidelines published in 1996 by the American Heart Association (AHA) in association with the American College of Cardiology (ACC). He testified without objection that he incorporated the guidelines into his practice shortly after they were published, because they helped physicians decide "which patient needs to go for a cardiac evaluation . . . and which patient can proceed to the operating room," and he identified proposed "Exhibit C" as the AHA/ACC "flow diagram that [he] used and continued to use to evaluate patients for pre-operative need for cardiac evaluation." (Neither of the physician-defendants who testified before Dr. Ilioff, in describing the basis for their decision not to refer Mrs. Hinlicky for preoperative cardiac testing, mentioned the algorithm.)

When defense counsel asked Dr. Ilioff for background on the guidelines, plaintiff objected to any testimony that would "involve a discussion of what others have stated or what others

[2] "One" signified a normal patient without any medical problems, "six" a patient who was brain-dead and presenting for an organ transplant.

have done. That is clearly hearsay." The Trial Court speculated as to whether "we need to get into the basis for the program he followed. It would involve other testimony by other experts and perhaps the objection is well founded in that regard." This colloquy ensued:

> "[DEFENSE COUNSEL]: And that is true, I believe, your Honor, but inasmuch as Dr. Ilioff has indicated that he utilized these guidelines himself, I believe it would be pertinent at this time to review those with him and that's what I'm attempting to do, to lay the foundation with respect to those guidelines.
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> "THE COURT: Well, I think perhaps if he can tell us the prominence of the conclusion they reached rather than going in to what they did to reach the conclusion that would perhaps obviate the hearsay problems.
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> "[PLAINTIFF's COUNSEL]: I don't have any problem if he wants to testify about his practice and how he conducts his practice. But it's improper to be testifying about what others have stated with respect to any of that."

After an off-the-record sidebar, Dr. Ilioff testified without further objection that the algorithm was "a flow diagram. And it helps us in a decision making process. Helps us decide what patients to send to the operating room, what patients to send to the cardiologist." According to the witness, the algorithm was commonly used by anesthesiologists but was also available to surgeons, internists and family physicians, and he would consult it for patients like Mrs. Hinlicky who were at risk for coronary artery disease to determine the need for cardiac

evaluation. When defense counsel offered the algorithm into evidence, plaintiff objected on the ground that:

> "this is a document taken from some other document. This is a chart taken from some other document. It's clearly hearsay in nature. And I believe that the witness can testify as to what guidelines he uses and how he uses them, but to use the chart, I think, is improper. As itself it is hearsay, that's my objection.
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> "THE COURT: Well, I think it probably is technically speaking hearsay, but I think it's a classic case for the use of the professional reliability exception to that rule. It is a document, as I understand it, which does not purport to resolve any crucial issue in the case. It's to be used only to explain an evaluation procedure in which a treating doctor used, as merely one link in the chain of which he relied upon to reach a conclusion. It is according to the testimony I've heard from the witness a material reasonably relied upon by anesthesiologists and others who do pre-operative assessments of a patient who [is] at some risk for coronary artery disease, is that true?
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> "THE WITNESS: That's correct.
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> "THE COURT: I'll allow it under the professional [re]liability exception to the rule against hearsay."[3]

Dr. Ilioff then testified that the chart provided a list of variables, the presence or absence of each variable pointing toward surgery or cardiac evaluation. The witness explained that he went through each step of the chart and, based

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[3] The court permitted defense counsel to use another document (Exhibit E)--a table defining high, intermediate and low surgical risks--as part of his examination of Dr. Ilioff on the theory that the table was incorporated into the algorithm. References to the algorithm include the table.

on his assessment of the variables, concluded that there was no need for a cardiac evaluation. He did not consider factors that were not on the chart, because in his opinion, such factors do not "make a difference in the patient's outcome."

Plaintiff called three medical experts, and defendants four. While not disputing the reliability of the algorithm, six of the seven expert witnesses clashed over its significance as the standard of care.

Plaintiff's Medical Experts

Plaintiff's cardiology expert maintained that at "mandatory minimum" Mrs. Hinlicky should have had a preoperative stress test. In his view, it was the standard of care to deal with heart problems before undertaking carotid surgery "under all reasonable medical conditions." On cross-examination, he acknowledged that the algorithm provided a general approach but a decision about treatment additionally requires consideration of the specifics of a patient's case. The guidelines "were never intended to be the standard of practice because it's too simplified, it's a general summary of the general approach." A vascular surgeon testified that "[t]he literature is abundant and was in 1996 that ruling out a critical coronary lesion or finding [and] correcting it . . . greatly reduces the cardiac risk [in] subsequent vascular surgery." He opined on cross-examination that guidelines "have some usefulness, but don't take in to account all risk factors and all clinical situation[s], so every

patient has to be individualized, not cookie-cuttered out." It was not reasonable, in his view, for a surgeon to rely solely on guidelines. Finally, a specialist in anesthesia and pain management agreed that Dr. Ilioff should not have permitted Mrs. Hinlicky to undergo surgery without further cardiac testing. While he was aware of the guidelines, he maintained on cross-examination that they were not published by a recognized anesthesia journal at the time and he had not incorporated them into his practice, as "guidelines are guidelines."

Defendants' Medical Experts

A surgeon called on behalf of Dr. Dreyfuss was president and CEO for medical affairs at Cayuga Medical Center; he testified that he was familiar with the guidelines promulgated in 1996, and that in 1997 a committee at his hospital adapted them as a model for their own surgeons (Exhibit F). Plaintiff's counsel objected on the ground that Exhibit F was created after Mrs. Hinlicky's death by a different hospital, and might have been based on information that did not exist in 1996. The court nonetheless allowed Exhibit F into evidence, and using it as a guide, the surgeon explained that he would not have ordered a cardiac evaluation. Second, an anesthesiologist testifying for Riverside noted that he and his colleagues were aware of Exhibit C and embraced it as "an important kind of a breakthrough, an important tool for all of us to use. . . . [a] common language we could use in a way to manage patients in very--both efficient and

safe way[s].” Using both Exhibit C and Exhibit F the anesthesiologist concluded that there was no need for a cardiac evaluation. Third, a cardiologist described Exhibit C as “the most logical sequence” to follow in determining when to call in a cardiologist for a pre-operative assessment. He opined that a physician relying on the guidelines in 1996 would be “practicing state of the art care.” Finally, an internist and specialist in geriatric medicine testified for Dr. Frank that his referral was appropriate and not a deviation from the standard of care; the witness was asked no questions about the guidelines.

Prior to charging the jury on the law, the Trial Court summarized the parties’ positions:

> “The plaintiff’s position and contention is that [a cardiac evaluation] referral was required by the standards of care prevailing in 1996, given Marie Hinlicky’s physical condition and history. The defendants contend that the 1996 guidelines adopted by the American Heart Association and the College of Cardiology were the standards of care in 1996 and were followed by the defendants in their care and treatment of Marie Hinlicky. And that, in accordance with the guidelines and their findings, a judgment was reached that no such referral was warranted.”

Only counsel for Dr. Frank raised an objection to the court’s instruction, eschewing reliance on the guidelines. Asked to determine whether each defendant was negligent for failing to secure a preoperative cardiac clearance, the jury unanimously found for defendants. The Appellate Division unanimously affirmed, holding that the Trial Court properly admitted the

algorithm into evidence because it was offered not for its truth, and "not to establish a per se standard of care but for the nonhearsay purpose of illustrating a physician's decision-making methodology" (18 AD3d 18, 21 [3d Dept 2005]). We now affirm.

Discussion

Plaintiff urges that the admission of the algorithm into evidence was reversible error entitling him to a new trial. Like the Appellate Division, we conclude that in this case the algorithm was correctly admitted during Dr. Ilioff's testimony as demonstrative evidence of the steps he had followed in clearing Mrs. Hinlicky for surgery.

In New York, scientific works generally are excluded as hearsay when offered for their truth (see People v Riccardi, 285 NY 21 [1941]).[4] For well over a decade, commentators have debated whether clinical practice guidelines such as those engendering the algorithm should be admissible for their "truth" as evidence of the standard of care (see e.g., Mello, Of Swords and Shields: The Role of Clinical Practice Guidelines in Medical Malpractice Litigation, 149 U Pa L Rev 645 [2001]; Williams, Evidence-Based Medicine in the Law Beyond Clinical Practice

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[4] Clinical practice guidelines have been defined variously as "systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances," and as "standardized specifications for care, either for using a procedure or for managing a particular clinical problem" (Rosoff, The Role of Clinical Practice Guidelines in Health Care Reform, 5 Health Matrix 369, 370 [1995]).

Guidelines: What Effect Will EBM Have on the Standard of Care?, 61 Wash & Lee L Rev 479 [2004]).[5]

While it is true that the algorithm is an extrajudicial statement, it would only be "classic" hearsay if offered to prove the truth of the matter asserted therein. Defense counsel, in cross-examining his client, sought to admit the algorithm on the ground that "as Dr. Ilioff has indicated that he utilized these guidelines himself, I believe it would be pertinent at this time to review those with him and that's what I'm attempting to do, to lay the foundation with respect to those guidelines." The witness testified that he used a "flow diagram" as an aid to determine which patients would be likely to benefit from a

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[5] Courts have set some parameters for the use of clinical practice guidelines in medical malpractice cases. For example, in Diaz v New York Downtown Hospital (99 NY2d 542, 545 [2002]), we rejected the use of clinical practice guidelines by plaintiff's expert to prove an accepted practice where the authoring body explicitly stated the guidelines were "not rules" and the expert failed to set forth a factual basis for her reliance on them. In Levine v Rosen (616 A2d 623, 628 [Pa 1992]), the Pennsylvania Supreme Court noted approvingly that the parties introduced conflicting recommendations of the American Cancer Society and the American College of Obstetricans and Gynecologists, and viewed the guidelines as "[u]nquestionably" establishing that two schools of thought existed in the medical community on a relevant issue. See also Frakes v Cardiology Consultants PC (1997 WL 536949 [Tenn Ct App 1997] [Koch, Jr., J. concurring] [noting that clinical practice guidelines have emerged as a response by the medical profession to perceived shortcomings in medical practice, and that such guidelines can materially assist jurors when properly authenticated, though they should not necessarily be viewed as conclusive evidence of the standard of care]).

cardiac work-up before surgery and which would not. He explained that "it helps us in a decision making process. Helps us decide what patients to send to the operating room, what patients to send to the cardiologist." Without objection, he testified that the process he used was consistent with a set of "clinical guidelines" recommended by the AHA and the ACC, that the "flow diagram" had been published prior to the surgery and that he had incorporated the process into his practice.

Thus, counsel offered the algorithm as a demonstrative aid for the jury in understanding the process his client had followed. Indeed, the Trial Court stated that it was admitting the algorithm to illustrate Dr. Ilioff's evaluation process: "It is a document, as I understand it, which does not purport to resolve any crucial issue in the case. It's to be used only to explain an evaluation procedure [] which a treating doctor used, as merely one link in the chain [] which he relied upon to reach a conclusion."

Before us, plaintiff now argues that the most troubling aspect of this approach is that there was no meaningful distinction between offering the algorithm to prove its truth, and offering it to illustrate the decision-making process of a party who stated that he adopted it in his practice. It may be that jurors could draw unsupported inferences from demonstrative evidence excerpted from clinical practice guidelines and reproduced as an exhibit. Here, however, the treating physician,

a fact witness, testified about his own use of Exhibit C (see Kaye et al., The New Wigmore: Expert Evidence § 4.5, at 148 [2004]) and plaintiff never requested a limiting instruction.

We reject plaintiff's contention that Spensieri v Lasky (94 NY2d 231 [1999]) mandates a different conclusion. In that case, the plaintiff sought to introduce the Physician's Desk Reference (PDR) by itself to establish the standard of care. This Court rejected the contention that the PDR constituted prima facie evidence of a standard of care, observing that the PDR could have some significance in identifying a doctor's standard of care, but it could not be determinative. We reasoned that material in the PDR should be analyzed only in the context of a patient's medical condition, and thus expert testimony would be needed to interpret whether the treatment in question presented an acceptable risk for the patient. We concluded that the plaintiff was not barred from offering expert testimony partially based on reliance on the PDR; rather, she was prohibited from offering excerpts from the PDR as "stand alone proof" of a standard of care (id. at 239). In this case, of course, the algorithm was not admitted "by itself" to establish a standard of care, but was admitted to explain "one link in the chain" of Dr. Ilioff's evaluation process.

Once admitted for demonstrative purposes, however, clinical practice guidelines may raise the question whether, and in what way, courts should circumscribe their use substantively

by medical experts. Indeed, here, experts on both sides were invited to opine on the algorithm's significance. Plaintiff's first expert acknowledged on cross-examination that the algorithm provided a general approach in the decision-making process, but that, in addition to the steps in the algorithm, a decision about treatment must be made by considering the specifics of the individual patient's case, such as the risks to the patient, the EKG, and the type of surgery to be performed. He also testified that he did not disagree with the guidelines so long as they were not utilized as a rule to be applied to all patients. Had plaintiff been concerned that the purpose for admitting the algorithm was changing from demonstrative to substantive evidence, he surely could and should have said so.

Defendants additionally maintain that the algorithm was properly admitted under the professional reliability exception to the hearsay rule, which enables an expert witness to provide opinion evidence based on otherwise inadmissible hearsay, provided it is demonstrated to be the type of material commonly relied on in the profession (see e.g., Hambsch v New York City Tr. Auth., 63 NY2d 723, 726 [1984]; see also Prince, Richardson on Evidence § 7-311 [Farrell 11th ed.]). Because the Trial Court's proper basis for admitting the algorithm was demonstrative and plaintiff made no request for clarification or limiting instructions, we need not reach this issue. We note only that whether evidence may become admissible solely because

of its use as a basis for expert testimony remains an open question in New York (see People v Goldstein, 6 NY3d 119, 126-127 [2005] [concerning out-of-court factual statements]). While some jurisdictions allow otherwise inadmissible materials relied upon by an expert witness to reach the jury for nonhearsay purposes, we have acknowledged the need for limits on admitting the basis of an expert's opinion to avoid providing a "conduit for hearsay" (id.).[6] Absent timely objection by plaintiff, however, we need not decide whether in this instance the Trial Court applied proper limits in allowing the algorithm to be viewed by the jury to evaluate the experts' opinions or for some other nonhearsay purpose.

Finally, plaintiff contends that the court erred in admitting Exhibit F during the testimony of a defense expert. Plaintiff timely objected to the chart on the ground that it was created a year after Mrs. Hinlicky's death by a different hospital, and might have been based on information that did not exist in 1996. Though admission of the chart may have been error on relevancy grounds, we conclude that such error was harmless.

Accordingly, the order of the Appellate Division should be affirmed, with costs.

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[6] For example, Rule 703 of the Federal Rules of Evidence ("Bases of Opinion Testimony by Experts") permits admission of "[f]acts or data that are otherwise inadmissible" when in its discretion the court determines the material has probative value in aiding the jury in evaluating the expert's opinion, substantially outweighing prejudicial effect.

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Order affirmed, with costs. Opinion by Chief Judge Kaye. Judges G.B. Smith, Ciparick, Rosenblatt, Graffeo, Read and R.S. Smith concur.

Decided May 2, 2006