STATE OF MICHIGAN

COURT OF APPEALS

JANET TOBIN, as personal representative of the Estate of ROLLIN TOBIN, deceased, Plaintiff-Appellee, v PROVIDENCE HOSPITAL, a Michigan hospital corporation, Defendant-Appellant.	FOR PUBLICATION February 16, 2001 9:10 a.m. No. 210536 Oakland Circuit Court LC No. 94-473478 NH Updated Copy March 30, 2001

Before: Owens, P.J., and M.J. Kelly and Hoekstra, JJ.

OWENS, P.J.

In this medical malpractice case, involving the death of Rollin Tobin on November 13, 1993, following hip replacement surgery, defendant appeals as of right from the jury verdict totaling $6,485,681.06, including taxable costs, attorney fees, and statutory interest. We reverse and remand for a new trial.

I

Plaintiff, the wife of the decedent and personal representative of his estate, alleged that her husband died as a result of the transfusion, during hip replacement surgery, of blood contaminated by Yersinia bacteria, contrary to his express request that any transfusions contain only his own (autologous) blood. Because he was concerned about receiving someone else's (allogeneic) blood, the decedent donated three units of autologous blood before the surgery. During the course of the surgery that began at 7:30 a.m. on November 12, 1993, he received a

transfusion of those three units of blood and additionally received a transfusion of one unit of allogeneic blood. Both the medical technologist who released the fourth unit of blood from the hospital's blood bank and the nurse anesthetist who administered the transfusion testified that, although they could not specifically recall that particular unit of blood, they routinely observed blood before releasing or administering it, and they stated that if this particular unit had appeared unusual they would not have used it.

While the decedent was in the recovery room after the operation, he was observed to be hypotensive—that is, his blood pressure dropped below normal levels—with his blood pressure dropping from 100/60 to 70/40. He was also tachycardic—his heart was racing—with a pulse rate of up to 160. He was bleeding excessively, his coagulation factors were elevated, and his fibrinogen level was low; this indicated a depletion in the level of clotting factors in his blood. According to one of plaintiff's expert witnesses, this suggested one of two alternatives: either the decedent was "bleeding out"—that is, he was losing blood rapidly and the blood was being replaced by liquids that did not contain clotting factors—or the clotting factors were being consumed in disseminated intravascular coagulation (DIC).[1] The decedent was therefore returned to the operating room at 3:07 p.m. in an attempt to determine why the continued bleeding was occurring.

A blood chemistry test (CBC) obtained at 3:45 p.m. disclosed an extremely low white cell count with indications of increased levels of immature white blood cells (band cells). This was an indication that the decedent's body was fighting an infection and, in an attempt to obtain sufficient white blood cells to combat the infection, was releasing immature cells. At 4:00 p.m.,

the decedent's temperature was twice recorded at 109.4 degrees. He received numerous units of additional blood during the second surgery.

In the recovery room after the second operation, at approximately 6:44 p.m., tests indicated the presence of DIC and his white cell count continued to drop. At 8:00 p.m. the decedent was moved to the critical care unit and sometime between then and 10:00 p.m. it was first recognized that he might be fighting sepsis. The decedent received his first dose of major antibiotics between midnight and 1:00 a.m. He died at approximately 7:00 a.m. on November 13, 1993. The subsequent autopsy concluded that the decedent died "as a consequence of sepsis and disseminated intravascular coagulation caused by transfusion of a unit of red blood cells contaminated with yersinia enterocolitica." Investigation by the hospital, the American Red Cross, and the Centers for Disease Control determined that the one allogeneic unit of blood the decedent received during his initial operation had been contaminated with Yersinia bacteria.

Before trial, defendant moved for summary disposition pursuant to MCR 2.116(C)(7), (8), and (10) on a variety of grounds. Relevant to this appeal, defendant argued that plaintiff's experts either were not qualified to testify about the standard of practice regarding the visual inspection of donor blood or had conceded that comparison of the color of the blood in the donor bag with the color of the blood in the attached segment of plastic tubing was not required by the standard of practice; that plaintiff had failed to demonstrate proximate cause with respect to the visual inspection of the donor blood because plaintiff had not shown that it was more probable than not that a detectable color change had already occurred when the blood was provided for transfusion to the decedent; and that plaintiff's breach of contract claim was barred by MCL 566.132(g); MSA 26.922(g) (commonly known as the statute of frauds) because the "contract"

was not contained in a signed writing, and also because the decedent consented to the administration of additional transfused blood if it was necessary. Defendant also moved for partial summary disposition regarding plaintiff's claim for damages in excess of the statutory cap on noneconomic damages, claiming that the statutory cap provided by MCL 600.1483; MSA 27A.1483 applied retroactively to this claim for damages. The trial court granted summary disposition with respect to plaintiff's breach of contract claim, but denied summary disposition of the other claims.[2]

Immediately before trial, defendant moved in limine to restrict or bar the testimony of plaintiff's expert medical witnesses. Among defendant's arguments was the claim that the proposed testimony of Mark Brecher, M.D., concerning his observations of a color change in blood contaminated by Yersinia bacteria was not scientifically reliable and that the standard of practice testimony offered by Dr. Brecher should be excluded because the proposed expert had conceded that a community hospital in 1993 was not required to conduct a comparison of the color of the blood in the donor bag with the color of the blood in the tubing segment attached to the bag, and the expert had also conceded he was not qualified to testify regarding the applicable standard of practice for a delay in diagnosis. Defendant also moved in limine to exclude from plaintiff's case any mention of the decedent's desire to avoid the administration of nonautologous blood. Defendant contended that, given the trial court's dismissal of plaintiff's breach of contract claim, such testimony would not be relevant and its prejudicial effect would outweigh its probative value. The trial court denied defendant's motions in limine.

At the conclusion of the trial, the jury found that defendant was liable for the decedent's death and awarded $426,872 for loss of past financial support and services covering a period of

almost four years (this amount was reduced to $295,833 by the trial court because of collateral source payments), together with a total of $426,832 for the four years after the trial (also reduced by collateral source payments to $331,116). The jury further awarded plaintiff $750,000 for the pain and suffering endured by the decedent between the time of the injury and the time of his death, $2 million for the family's loss of society and companionship in the past, and $2 million for the family's loss of society and companionship with the decedent in the year 1997, but nothing for succeeding years. The trial court subsequently denied defendant's motions for judgment notwithstanding the verdict, for a new trial, and for remittitur.

II

Plaintiff claimed that as a result of the decedent's expressed desire not to receive a transfusion of allogeneic blood, the decedent and defendant had a contract that defendant breached by administering a unit of such blood during the hip replacement surgery. The trial court granted summary disposition for defendant regarding this claim. Nevertheless, the trial court overruled defendant's objection to plaintiff's counsel or her witnesses being permitted to mention the decedent's desire not to receive allogeneic blood. Defendant contends that this testimony was not relevant to any issue of malpractice or damages, that hearsay testimony relating to this irrelevant claim was improperly admitted, and that any minimal relevance that this evidence might have possessed was outweighed by the danger of unfair prejudice. We agree.

As defendant correctly notes, plaintiff's counsel began his opening statement by stating:

> May it please the Court, . . . Jan Tobin and her family have waited a long time for the opportunity to present this case to you because we believe that as fair-minded citizens in this community, you will agree with us that *a patient at a hospital is entitled to make a choice not to receive a stranger's blood and if—and*

perhaps more importantly, if while helpless on a table that choice is taken from him—

* * *

We believe that as fair-minded jurors, you will agree with us that *an individual that goes into a hospital has the right to make a choice not to receive a stranger's blood, and if while helpless on an operating table that choice is taken from him, he is entitled to a chance, a chance to survive.*

Jerry Tobin was not given a choice and he was not given a chance; and that's what this case is all about. [Emphasis supplied.]

Plaintiff's counsel went on to inform the jury of the decedent's desire to avoid receiving anyone else's blood or to having his body "injected with foreign blood." Plaintiff's counsel further stated that once the decedent was in the operating room, he was "rendered helpless, no longer can the individual help himself in this setting. He's . . . not able to refuse the blood that they put in him, and not able to say no." Plaintiff's counsel also stated that when the surgeons used up the three units of blood that the decedent had donated, "they called the blood bank and an additional unit of blood was brought to the operating room. This was not Jerry Tobin's blood. This was blood that was imported from somebody in Wisconsin." Plaintiff's counsel subsequently reiterated, "At 12:20 this blood comes into his system. Injecting blood into somebody's body is a serious thing. I mean now it's foreign blood. Now it's some stranger's from Wisconsin blood." Plaintiff's counsel revisited this theme when he questioned the decedent's family and friends.

Plaintiff's counsel returned to this theme during his closing and rebuttal arguments. He initially repeated his statement from his opening that "a patient in this community . . . is entitled to make a choice not to receive a stranger's blood." Subsequently, while discussing the testimony of one of the expert witnesses, plaintiff's counsel argued that it was readily apparent that the bag

of allogeneic blood was contaminated and that the jury could "forget about [the decedent's] survivability after he got it; he never should have got it in the first place. He didn't want it; he shouldn't have got it."

Only relevant evidence is admissible. MRE 402. Relevant evidence is "evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." MRE 401; *Dep't of Transportation v VanElslander,* 460 Mich 127, 129; 594 NW2d 841 (1999), quoting *Yates v Keane,* 184 Mich App 80, 82; 457 NW2d 693 (1990). Even relevant evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury. MRE 403. We review for abuse of discretion the trial court's decision to admit evidence. *Chmielewski v Xermac, Inc,* 457 Mich 593, 614; 580 NW2d 817 (1998).

Once the trial court dismissed the breach of contract claim, the decedent's desire not to have "the blood of a stranger" administered to him, or the "deprivation" of his "choice" not to receive allogeneic blood during his surgery, ceased to have any relevance. The issue at trial was not whether he had received a stranger's blood despite his wishes, whether he had an enforceable choice to decline the transfusion of such blood, or whether the hospital's consent form for the transfusion of allogeneic blood was an unconscionable contract. The issue was whether defendant should have recognized that the allogeneic blood was contaminated and whether defendant should have recognized sooner that the decedent was septic so that life-saving treatments could have been promptly initiated.

Nor was this evidence relevant to damages. It is well settled that exemplary damages are not recoverable in a wrongful death action. *Fellows v Superior Products Co*, 201 Mich App 155, 157; 506 NW2d 534 (1993). In a wrongful death action, MCL 600.2922; MSA 27A.2922 limits damages to

> reasonable medical, hospital, funeral, and burial expenses for which the estate is liable; reasonable compensation for the pain and suffering, while conscious, undergone by the deceased person during the period intervening between the time of the injury and death; and damages for the loss of financial support and the loss of the society and companionship of the deceased.

There was no showing that the decedent was aware, between the time of his injury and death, that his suffering was due to the administration of allogeneic blood. Furthermore, the decedent's desire not to receive allogeneic blood had no effect on the family's loss of the decedent's financial support, companionship, and society. Therefore, this Court concludes that the trial court abused its discretion by permitting plaintiff to introduce evidence regarding the decedent's desire not to receive "a stranger's blood."

This Court further concludes that the trial court erred in permitting the introduction of hearsay statements of the decedent and an unidentified person at the hospital because these statements did not come within any exception to the hearsay rule. During his questioning of the decedent's friend, Rodger Knight, plaintiff's counsel asked if the decedent had discussed his concerns regarding receiving someone else's blood in the course of surgery and Knight responded that the decedent was very concerned about receiving someone else's blood. Counsel further asked Knight if the decedent had told him about any conversations the decedent had "with the hospital" regarding the donation of his blood. Knight replied that the decedent told him that he

had been required to sign a consent form allowing the surgeons to administer "somebody else's blood if it's necessary."

Defendant objected to the introduction of this testimony, contending that it was hearsay. Plaintiff responded that the decedent's statement was admissible under the present sense impression exception to the hearsay rule and that whoever made the "hospital's" statement to the decedent was clearly an employee of the hospital and therefore defendant's agent. Labeling this "a principal concern," "a material issue between the parties," and "a crucial issue," the trial court ruled that it would "grant some latitude pursuant to [MRE] 803(1)."

Hearsay is a statement, other than one made by the declarant while testifying at trial, offered in evidence to prove the truth of the matter asserted. MRE 801(c). Hearsay is not admissible except as provided by the rules of evidence. MRE 802. MRE 803(1) provides that "[a] statement describing or explaining an event or condition made while the declarant was perceiving the event or condition, or immediately thereafter" is not excluded by the hearsay rule. The conversation with the decedent related by Knight does not appear to have occurred at the time the declarant (the decedent) was perceiving the "event" or immediately thereafter. Plaintiff clearly presented this statement to prove the truth of the matter asserted therein—that the decedent was forced to sign the consent form. Thus, the decedent's statement to Knight is hearsay and was not admissible under MRE 803(1). Moreover, it also appears that the alleged statement of some unidentified person at the hospital to the decedent was also hearsay. Plaintiff never established, but rather merely asserted, that the declarant was a representative or agent of the hospital. Therefore, the trial court abused its discretion by admitting this double hearsay over defendant's objection.

Finally, the trial court has the responsibility to control the introduction of evidence and the arguments of counsel and to limit them to relevant and material matters. *People v Ullah,* 216 Mich App 669, 674; 550 NW2d 568 (1996), citing MCL 768.29; MSA 28.1052 and *Reetz v Kinsman Marine Transit Co,* 416 Mich 97, 103, n 9; 330 NW2d 638 (1982). To the extent introduction of some evidence regarding the decedent's desire not to receive allogeneic blood was minimally relevant, the trial court failed to carry out its duty to limit plaintiff's comments regarding the decedent's desire not to receive allogeneic blood so as to avoid the use of such highly charged words as "stranger's" or "foreign" blood or to exclude testimony or argument that suggested that the decent had an enforceable "right" or "entitlement" not to receive allogeneic blood—particularly where, reluctantly or otherwise, the decedent had signed a consent form to receive such blood if it proved necessary during the surgery.

This Court therefore concludes that the trial court abused its discretion by allowing plaintiff to argue and present evidence regarding the decedent's desire not to receive the blood of a stranger. Nevertheless, we must determine whether this error was prejudicial. *Merrow v Bofferding,* 458 Mich 617, 634; 581 NW2d 696 (1998). The basic evidence that the decedent received allogeneic blood was properly admitted. In the context of the entire trial, the direct references to the decedent's desire were relatively brief. The trial court did instruct the jury before opening statements and after closing arguments that the statements of counsel were not evidence. This admonition is generally sufficient to cure the prejudice arising from improper remarks of counsel. *People v Bahoda,* 448 Mich 261, 281; 531 NW2d 659 (1995). Accordingly, this Court cannot conclude that defendant is entitled to a new trial on the basis of this claim alone. However, as this Court has concluded that a new trial is merited on the basis of other

issues, the trial court is cautioned that at the retrial it should carefully limit the testimony and argument regarding the decedent's desire not to receive allogeneic blood.

III

Defendant next contends that the trial court committed error requiring reversal in denying defendant's motion for a directed verdict regarding plaintiff's claim that it was malpractice for defendant's employees to fail to monitor and record the decedent's temperature before, during, and after the initial operation—particularly during the transfusion of the allogeneic blood.[3] Defendant argues that plaintiff failed to present any testimony in her case in chief to establish that failure to monitor or record the decedent's temperature was a violation of the applicable standard of care or that it was a proximate cause of the decedent's death. Defendant further claims that because plaintiff failed to present such testimony in her case in chief, the trial court committed error in permitting plaintiff to introduce such testimony in her rebuttal case over defendant's objection. We agree.

This Court reviews de novo a trial court's decision to grant or deny a motion for a directed verdict. *Meagher v Wayne State Univ*, 222 Mich App 700, 708; 565 NW2d 401 (1997). This Court evaluates a motion for a directed verdict by considering "the evidence in the light most favorable to the nonmoving party, making all reasonable inferences in the nonmoving party's favor." *Locke v Pachtman*, 446 Mich 216, 223; 521 NW2d 786 (1994). Our Supreme Court stated in *Locke, supra* at 222:

> Proof of a medical malpractice claim requires the demonstration of the following four factors: (1) the applicable standard of care, (2) breach of that standard of care by the defendant, (3) injury, and (4) proximate causation between the alleged breach and the injury. MCL 600.2912a; MSA 27A.2912(1). To

survive a motion for directed verdict, the plaintiff must make a prima facie showing regarding each of the above elements.

Plaintiff's counsel conceded that Dr. Brecher's testimony regarding the standard of care for temperature monitoring was being introduced for the first time on rebuttal because Dr. Brecher (and presumably plaintiff's counsel) had "missed" this particular issue "until somebody told him." Likewise, plaintiff's expert witness, Dr. Brecher, conceded that during his examination in plaintiff's case in chief, he did not "say a word" about temperature. Plaintiff's justification for the belated introduction of this testimony was that the nurse anesthetist had testified in defendant's case that he monitored the decedent's temperature. The trial court accepted this explanation and ruled that plaintiff was entitled to refute the anesthetist's testimony.

This Court concludes that the trial court committed error requiring reversal by denying defendant's motion for a directed verdict on plaintiff's claim of failure to monitor and record the decedent's temperature. Plaintiff specifically alleged in her amended complaint that defendant committed malpractice by failing to monitor and record the decedent's temperature before, during, and after the initial operation. Had the trial court granted this motion, as it should have, plaintiff's allegations of negligence due to the failure to monitor the decedent's temperature before, during, and after the operation would have been dismissed and the questioning of the nurse anesthetist concerning whether he monitored or recorded the decedent's temperature would have been rendered irrelevant. Thus, there would have been no basis for the introduction of Dr. Brecher's rebuttal testimony on this issue.

Moreover, as defendant also argues, there was no testimony that failure to monitor or record the decedent's temperature before, during, and after the operation caused his death. There was no testimony that the decedent's temperature would have been abnormal during the

transfusion. Significantly, the transfusion occurred at the very end of the operation. There was no testimony that the contaminated blood would have caused an immediate temperature spike. Plaintiff 's experts agreed that the first signs of a transfusion reaction occurred when the decedent was in the recovery room, one hour *after* the contaminated blood had been administered. The testimony established that the first observation of an abnormal temperature was when the decedent was in the operating room at about 4:00 p.m.—approximately four hours after the initial surgery. Dr. Brecher testified that, at that point, the increased temperature was "a red flag that *one of the possibilities* is . . . clinical sepsis." (Emphasis supplied.) Dr. Brecher went on to testify that because a transfusion reaction is a rare event, it was not unusual for a treating physician to consider other explanations for the decedent's postoperative symptoms. Dr. Brecher stated that it was not until around 4:00 p.m. when the decedent's temperature registered 109 degrees that the decedent's doctors should have suspected that he was suffering from sepsis.

This testimony established that the failure to monitor and record the decedent's temperature did not cause his death because there was a total absence of any testimony that monitoring the decedent's temperature before, during, and after the transfusion would have enabled the hospital staff to determine before the transfusion that the nonautologous blood contained Yersinia bacteria in a lethal amount, or that it would have alerted the staff that infection was being introduced into the decedent's body by the transfusion of contaminated blood. Defendant was therefore entitled to dismissal of the claim of malpractice predicated on the failure to monitor and record the decedent's temperature before, during, and after the transfusion. Because the jury was not asked to make a distinct determination with respect to each theory of malpractice alleged by plaintiff, it is impossible to know if the jury rejected the other

theories advanced by plaintiff and rendered judgment based on this improperly submitted theory. "[A] general verdict is either all wrong or all right because it is an inseparable and inscrutable unit. A single error completely destroys it." *Sahr v Bierd*, 354 Mich 353, 365; 92 NW2d 467 (1958), quoting Sunderland, *Verdicts, general and special*, 29 Yale L J 253, 259 (1920). Therefore, the trial court committed error requiring reversal and a new trial in failing to grant defendant's motion for a directed verdict and in permitting plaintiff to present evidence regarding this issue in her rebuttal case.

IV

Defendant next contends that the trial court committed error requiring reversal in ruling that plaintiff 's expert witness could testify concerning his theory that blood contaminated by the Yersinia bacterium would change to a dark purple color within twenty-four to thirty-five days after it was obtained from the donor. On the basis of this theory, plaintiff alleged that defendant committed malpractice by failing to adequately inspect the blood for such a color change, and she claimed that this alleged failure to inspect could be inferred from the fact that, if it had been adequately inspected, hospital staff could not have failed to notice that the blood had changed color.

In *Nelson v American Sterilizer Co (On Remand)*, 223 Mich App 485, 489-490; 566 NW2d 671 (1997), this Court stated that

> the trial court was charged with ensuring that any and all scientific testimony to be admitted was not only relevant, but also reliable.
>
> The primary source of this obligation is MRE 702, which clearly contemplates some degree of regulation of the subjects and theories about which an expert may testify. . . .

> MRE 702 provides, in pertinent part, that if "*recognized scientific . . . knowledge* will assist the trier of fact to understand the evidence or to determine a fact in issue," then an expert "may testify *thereto*." (Emphasis added.) Accordingly, MRE 702 restricts the subject of an expert's testimony to "recognized scientific . . . knowledge." [Citations omitted.]

This Court stated further that there was no guidance from prior Michigan cases concerning the meaning of the phrase "recognized scientific knowledge." This Court therefore construed the phrase in accordance with principles of statutory construction and reasoned:

> We conclude that MRE 702 requires a trial court to determine the evidentiary reliability or trustworthiness of the facts and data underlying an expert's testimony before that testimony may be admitted. To determine whether the requisite standard of reliability has been met, the court must determine whether the proposed testimony is derived from "recognized scientific knowledge." To be derived from recognized scientific knowledge, the proposed testimony must contain inferences or assertions, the source of which rests in an application of scientific methods. Additionally, the inferences or assertions must be supported by appropriate objective and independent validation based on what is known, e.g., scientific and medical literature. This is not to say, however, that the subject of the scientific testimony must be known to a certainty . . . . As long as the basic methodology and principles employed by an expert to reach a conclusion are sound and create a trustworthy foundation for the conclusion reached, the expert testimony is admissible no matter how novel. [*Nelson, supra* at 491-492.]

In the context of this case, this Court concludes that plaintiff failed to demonstrate that Dr. Brecher's testimony regarding the alleged color change that he believed would have occurred in the bag of contaminated blood was the result of sound method or that it was "supported by appropriate objective and independent validation." *Id.* at 491.

Dr. Brecher testified that during the course of his professional career, "over the years," in laboratories at the Mayo Clinic and at the University of North Carolina, he had inoculated forty-four units of blood with Yersinia bacteria. In thirty-two of these units the Yersinia bacteria actually grew, and in thirty-one of those units in which the bacteria grew, Dr. Brecher was able to detect a notably darker color during the storage period of the units. He stated that it was "our

impression that all the units had turned darker by Day 35." (Emphasis supplied.) Dr. Brecher stated that it was not his original intention to study color change in the blood, but rather he was engaged in a study of the Yersinia bacteria "as part of other research or protocols." After being contacted about the case before this Court,[4] he put Yersinia bacteria into two units of blood and watched them on a daily basis for color change; he concluded that one had changed to an abnormally dark color on the twenty-fourth day and the other had done likewise on the twenty-seventh day.[5] However, he conceded: "That's not to say that that would have been the case here. Different isolates behave differently. Storage conditions can vary beginning with the biological system." Dr. Brecher further testified that he observed another phenomenon: the color of the bag of blood contaminated with the Yersinia bacteria would differ from the color of the blood contained in the segment of plastic tube attached to the contaminated bag. Dr. Brecher quoted from the 1990 Technical Manual of the American Association of Blood Banks: "A purple clot, clots in the bag or hemolysis suggest contamination, *but the appearance of the blood bag is often unremarkable*" (emphasis supplied). This was one of the manuals that he contended established the applicable standard of care for the transfusion of blood in 1993. Dr. Brecher then opined:

> Given the sero-type of this particular Yersinia, the degree of the reaction that Mr. Tobin suffered and the age of the unit, I think it was very likely that that unit was dark. I can't say for sure, but I think it's very likely.

On cross-examination, Dr. Brecher admitted that he had never seen blood that was infected with Yersinia in both the bag and the tubing segment. He also acknowledged that he could not say for sure that the bag in this case was noticeably darker than the segment of tubing because he was not there and "[b]iology systems vary." Dr. Brecher further acknowledged that he was not saying that a bag of contaminated blood would invariably be darker than the blood in the attached tubing segment, and that he did not know if the color of the blood in the bag in this

case differed from the color of the blood in the attached tubing segment, or if the contaminated thirty-one-day-old blood in this case would have already turned a darker color. He also admitted that sometimes units of blood contaminated with Yersinia bacteria would appear normal upon gross observation.

Dr. Brecher's testimony did not establish the evidentiary reliability and trustworthiness of the facts and data that underlay his testimony. *Nelson, supra* at 491. Dr. Brecher acknowledged that his most extensive "study" of this phenomenon took place over a number of years, at two different locations, in the context of conducting *other* research, and that the subject bags were not visually inspected on a daily basis. There is no indication that he conducted a controlled study, using a control group of blood bags that had not been injected with Yersinia bacteria, but which had been stored under identical conditions. Nor did he indicate that he conducted such a controlled study in "real world" conditions corresponding to the hospital blood storage room, the operating room, or the recovery room in this case. The one study that he did conduct that was specifically directed at determining when the Yersinia-infected blood bags changed color involved just *two* bags of contaminated blood and no control group. Even in those two cases, the abnormal color change occurred on two *different* days—the twenty-fourth and twenty-seventh days after the bacterial injection. Furthermore, Dr. Brecher admitted that the literature seemed to suggest that not every bag of blood infected with Yersinia bacteria would undergo a detectable color change and he did not know whether the bag in this case had done so.

Given the serious problems with this testimony, as admitted by Dr. Brecher, defendant's challenge to the reliability of Dr. Brecher's conclusions—including as it did affidavits from other scientists and opposing journal articles—should have caused the trial court to follow the dictates

of *Nelson* and conduct a hearing "to determine the evidentiary reliability or trustworthiness of the facts and data underlying [the] expert's testimony before that testimony may be admitted." *Id.* at 491. Plaintiff's claim that defendant failed to present an expert witness to contest the reliability of Dr. Brecher's opinions *during trial* is without merit. The reliability of the expert's testimony is to be determined by the *judge* in advance of its admission—not by the jury at the conclusion of the trial by evaluating the testimony of competing expert witnesses. *Nelson, supra* at 489. Dr. Brecher's testimony does not establish the evidentiary reliability and trustworthiness of his scientific conclusions or demonstrate that they constitute "recognized scientific knowledge." The trial court therefore abused its discretion by permitting Dr. Brecher to testify that a detectable color change would have occurred in the contaminated bag of allogeneic blood. If plaintiff seeks at the retrial to present the testimony of Dr. Brecher, the trial court should conduct a hearing under MRE 702 and *Nelson, supra,* to determine whether his testimony concerning the allegedly detectable color change constituted recognized scientific knowledge as of November 12, 1993.

V

Defendant next argues that where plaintiff's two experts could not agree concerning the likelihood of the decedent's survival after he received contaminated blood, a directed verdict should have been granted because plaintiff offered only speculation regarding the issue of proximate causation. This Court disagrees.

In *Lamson v Martin (After Remand),* 216 Mich App 452, 455; 549 NW2d 878 (1996), this Court stated:

> In determining whether a motion for directed verdict was erroneously denied, we review all evidence admitted until the time of the motion to determine whether a question of fact existed. We consider the evidence in the light most

> favorable to the nonmoving party. When the evidence could lead reasonable jurors to disagree, the trial court may not substitute its judgment for that of the jury. Directed verdicts are not favored in negligence cases. [Citations omitted.]

On cross-examination by defendant, plaintiff's expert witness Dr. Brecher testified that when the decedent developed DIC in the recovery room following the initial operation, "the die was cast" and it was more likely than not that he would die in spite of whatever medical intervention might have subsequently taken place. On the other hand, plaintiff's infectious disease expert witness, Dr. Lowell Young, disagreed and testified that the decedent would have had a seventy to eighty per cent chance of survival if antibiotics had been administered by 5:00 p.m. and that it was more likely than not that he would have survived if the antibiotics had been administered by 10:00 p.m.[6]

Although Dr. Brecher testified that it was his opinion that the "die was cast" when the transfusion of contaminated blood occurred, he also specifically stated that he was not an expert in infectious diseases and that he would defer to the opinion of such an expert. Thus, contrary to defendant's view, the jury was not actually faced with two equally qualified experts who could not agree. Rather, Dr. Brecher offered his opinion on the subject, but he also candidly admitted that it was not within his area of expertise and that he would defer to an expert in that area. Dr. Young was such an expert. In these circumstances, considered in a light most favorable to the nonmoving party, there was sufficient evidence presented to support the trial court's decision to deny defendant's motion for a directed verdict and to permit the jury to determine the relative weight to be accorded to the experts' testimony.

VI

Defendant next contends that the trial court committed error requiring reversal when, despite repeated objections regarding a lack of foundation concerning the qualifications of plaintiff's expert witnesses, the trial court nonetheless permitted those two witnesses to testify concerning the applicable standards of care. Defendant first argues that plaintiff never identified the personnel who allegedly negligently treated the decedent and therefore never established if her expert witnesses practiced in the same specialty. This claim implicates MCL 600.2169; MSA 27A.2169.[7] Defendant also argues that plaintiff's experts were permitted to testify about what amounted to a "universal, generic standard of practice" because they described a national minimum standard of care and failed to identify the hospital personnel who breached this standard. This claim implicates MCL 600.2912a; MSA 27A.2912(1).[8] We conclude that appellate review of both claims has been forfeited. However, since this case is being remanded for retrial, we further conclude that the amended statutes are not applicable to this case and should not be applied to evaluate the credentials of plaintiff's proposed experts before the retrial.

The determination whether a witness is qualified as an expert and whether the witness' testimony is admissible is committed to the trial court's sound discretion and therefore is reviewed for an abuse of discretion. *Mulholland v DEC Int'l Corp,* 432 Mich 395, 402; 443 NW2d 340 (1989); *Joerger v Gordon Food Service, Inc,* 224 Mich App 167, 175; 568 NW2d 365 (1997).

This Court, in the recent decision of *Greathouse v Rhodes,* 242 Mich App 221, 231; 618 NW2d 106 (2000), held that a party's challenge under § 2169 to an expert's qualifications must be brought, if at all, "within a reasonable time after learning the expert's identity" and that failure to timely challenge an expert's qualifications "results in forfeiture of the issue." In *Greathouse*,

the plaintiff contended that the defendant's experts were unqualified to testify concerning the relevant standard of care because they were not board-certified surgeons, as was the defendant. The plaintiff's motion to strike was filed less than a month before trial and a hearing on the motion was held the day before trial. *Id*. at 224. This Court concluded that the plaintiff was aware of the defendant's expert witnesses sufficiently in advance of trial so that there was no excuse for waiting until less than a month before trial to challenge the qualifications of these witnesses. *Id.* at 234-235. Moreover, this Court also observed that the "defendant would have been severely prejudiced had the trial court granted [the] plaintiff's motion" because striking the defendant's expert standard-of-care witnesses at trial would have handicapped the defendant's ability to present his case since it would have been practically impossible to obtain replacement witnesses on such short notice. *Id.* at 235.

In *Cox v Flint Bd of Hospital Managers (On Remand)*, 243 Mich App 72; 620 NW2d 859 (2000), this Court considered a similar situation. The plaintiff claimed that the doctors, nurses, and residents who staffed the neonatal intensive care unit had, by their cumulative acts, committed medical malpractice resulting in serious and permanent injury to a newborn's brain. *Id.* at 75. Over the defendant's objections, the plaintiff's expert witnesses testified, in conformity with the plaintiff's theory, that the acts of the staff of the neonatal intensive care unit violated the applicable standard of care; the experts claimed that this was a national standard. *Id.* at 79. The defendant's objections to the qualifications of the plaintiff's expert witnesses were made shortly before the commencement of the trial and also at the time the experts testified. *Id.* at 79-80. The defendant's expert also testified that a national standard of care applied, although he contended that no breach of that standard had occurred. *Id.* at 79. Noting that the defendant had not moved

to strike the experts' testimony within a reasonable time of learning of the experts' identities and qualifications, this Court held that the defendant's failure to make a timely motion resulted in a forfeiture of its right to appellate review of this issue. *Id.* at 80. This Court further held that, even if the issue were considered, the defendant could not prevail because, given that its expert had agreed that a national standard of care was the appropriate standard, the defendant had failed to demonstrate that the trial court abused its discretion by permitting the plaintiff's experts to base their testimony on such a standard. *Id.* at 81-82.

Plaintiff gave notice of her intent to use Dr. Young as an expert witness when she listed his name in her initial witness list filed May 15, 1995. Furthermore, in her answer to defendant's interrogatories, plaintiff asserted that Dr. Young would be presented as an expert witness to testify that "there was an unnecessary delay in administering antibiotic therapy after the decedent reacted to the tainted blood." Plaintiff gave notice of her intent to use Dr. Brecher as an expert witness on October 30, 1995, and a discovery deposition of Dr. Brecher was taken on May 1, 1996. Defendant did not file its objection to the qualifications of plaintiff's expert witnesses until it filed its motion for partial summary disposition on July 28, 1997. The motion contended, in part, that plaintiff's experts had not addressed or identified the particular claims of negligence that were asserted in plaintiff's initial complaint as breaches of the standard of care, and that the experts were not qualified to testify to the standard of practice regarding the visual inspection of donor blood.[9] The motion did not reference § 2169 or claim that the plaintiff's proposed experts were unqualified under the statute to offer standard of care testimony.[10] Defendant also filed, on July 28, 1997, a motion in limine contending that the trial court should exclude the standard of practice testimony offered by plaintiff's expert, Dr. Brecher.[11] During trial, defendant

specifically objected to the standard of practice testimony offered by Dr. Brecher. Also, during the course of Dr. Young's deposition, defendant made a "continuing," but nonspecific, objection to Dr. Young's standard of care testimony.[12]

Under our decisions in *Greathouse* and *Cox*, we are compelled to conclude that defendant has forfeited its claim regarding the qualifications of Dr. Brecher and Dr. Young under § 2169 to present standard of care testimony. Defendant was made aware of these expert witnesses very early in the litigation, but waited until shortly before trial to raise any issue with regard to their qualifications. Even then, the issue that defendant raised did not specifically refer to the experts' lack of qualifications pursuant to § 2169. This specific objection was raised for the first time in defendant's motions for judgment notwithstanding the verdict and for a new trial. Accordingly, we hold that defendant forfeited this issue by failing to raise it in a reasonable time after learning the experts' identities. *Greathouse, supra* at 231; *Cox, supra* at 80.

However, since we reverse on other grounds and remand this case for a new trial, we will address the issue of the applicability of the 1993 legislative amendments of MCL 600.2169; MSA 27A.2169[13] and MCL 600.2912a; MSA 27A.2912(1)[14] to give guidance to the trial court.

Although plaintiff did not specifically direct her claim of malpractice at a named individual or individuals at the hospital,[15] the testimony made it clear that Dr. Brecher was being offered as an expert regarding the recognition of bacterial contamination of blood and the proper procedures for transfusing blood. Thus, the persons against whom Dr. Brecher's testimony was offered were certified registered nurse anesthetist Roger Vail and, to a lesser extent, medical technician Nancy Broadbridge because they were the only individuals who were identified as having directly handled and transfused the allogeneic blood. Dr. Brecher was not of the same

specialty as these individuals; he was not a nurse anesthetist or a medical technician. Dr. Brecher's qualifications did not precisely match those of either Vail or Broadbridge. *Greathouse, supra* at 231. However, under the pre-1993 amendments of § 2169, Dr. Brecher qualified as a specialist in "a related, relevant area of medicine." See MCL 600.2169(1)(a); MSA 27A.2169(1)(a) before amendment by 1993 PA 78 and *McClellan v Collar (On Remand),* 240 Mich App 403, 412; 613 NW2d 729 (2000).

Similarly, Dr. Young was not a nurse anesthetist, an emergency room surgeon, or a critical care physician, yet he offered his criticisms of the behavior of the hospital personnel in these areas based on his purported knowledge of the standard of care that applied to each of these specialties. Under the language of the former statute, Dr. Young qualified as a specialist in "a related, relevant area of medicine." See MCL 600.2169(1)(a); MSA 27A.2169(1)(a) before amendment by 1993 PA 78. Dr. Young could also properly testify concerning the proximate cause of the decedent's death based on a failure to make a timely diagnosis, to communicate the laboratory test results, or to initiate treatment.[16]

Thus, the pertinent question for this Court to resolve is whether the 1993 amendment of § 2169 is to be applied retroactively to this case where the cause of action arose, and the complaint was filed, after October 1, 1993 (the date *before which* the statute specifically provides the amendments are not to apply retroactively) and before April 1, 1994 (the actual effective date of the act), after which the amendments clearly apply. To resolve this question, we rely on prior case law concerning the retroactivity of amendatory statutes.

Amendments of statutes are generally presumed to operate prospectively unless the Legislature clearly manifests a contrary intent. *Selk v Detroit Plastic Products,* 419 Mich 1, 9;

345 NW2d 184 (1984). Our Supreme Court has stated that there are four general "rules" concerning the retroactivity of statutes: (1) "is there specific language in the new act which states that it should be given retrospective or prospective application"; (2) simply because a statute relates to an antecedent event, it is not necessarily regarded as operating retrospectively; (3) "[a] retrospective law is one which takes away or impairs vested rights acquired under existing laws, or creates a new obligation and imposes a new duty, or attaches a new disability with respect to transactions or considerations already past"; and (4) "a remedial or procedural act which does not destroy a vested right will be given effect where the injury or claim is antecedent to the enactment of the statute." *Karl v Bryant Air Conditioning Co*, 416 Mich 558, 570-571; 331 NW2d 456 (1982) (citations omitted).

We find that the first rule applies to this case. Section 3 of 1993 PA 78 provides that "[t]his amendatory act shall take effect October 1, 1993." Section 4(3) of 1993 PA 78 then provides that amended § 2169 (and others) "do not apply to cases filed before October 1, 1993." It is clear from these two sections that the Legislature intended the amendments not to apply retroactively before the effective date of the act, which was intended to be October 1, 1993, assuming the act was given immediate effect. However, when the act was approved on July 8, 1993, the Legislature failed to give it immediate effect. As a result, the effective date of the act defaulted to April 1, 1994, ninety days after the Legislature adjourned sine die. It is clear from the foregoing that the act applies to cases filed after its effective date of April 1, 1994. It is equally clear that the act, by its own terms, does not apply retroactively to cases filed before October 1, 1993. What is not immediately obvious is whether the act applies retroactively only to cases filed after October 1, 1993, and before April 1, 1994. While an argument could be made

that when the Legislature failed to pass the act by enough votes to give the act immediate effect, and also failed to change the dates in 1993 PA 78, §§ 3 and 4, it intended that the statute be given retroactive application only for cases filed between October 1, 1993, and April 1, 1994, it seems far more reasonable to assume, in the absence of contrary evidence, that the Legislature intended that the amendments of § 2169 (and others) apply only to cases filed after the effective date of the act. It is the opinion of this Court that the clear intent of the Legislature should be honored. Therefore, we hold that the act is to be applied prospectively only from April 1, 1994, and not retroactively for the six-month period from October 1, 1993, to April 1, 1994, or before October 1, 1993.

The second rule of retroactivity does not apply to our determination. Our Supreme Court explained in *Karl, supra* at 571:

> Second rule cases relate to measuring the amount of entitlement provided by a subsequent statute in part by services rendered pursuant to a prior statute . . . . Examples of second rule cases are measuring the amount of a judicial pension not only by years served subsequent to enactment but also by years served under a previous act . . . and measuring the amount of highway entitlement not only by expenditures subsequent to enactment but also by expenditures under a previous act. [Citations omitted.]

The case before this Court does not involve the measurement of entitlements spread over some period both before and after the effective date of the new statute.

"The third rule 'define[s] those retrospective situations that are not legally acceptable, whereas the fourth rule defines those that are acceptable.'" *Seaton v Wayne Co Prosecutor (On Second Remand)*, 233 Mich App 313, 317-318; 590 NW2d 598 (1998), quoting *Karl*, *supra* at 572. With respect to the third rule, our Supreme Court has stated:

> The general rule against retrospective application has been applied in cases where a new statute abolishes an existing cause of action. It is clear that once a cause of action accrues—*i.e.*, all the facts become operative and are known—it becomes a "vested right". . . . A new statute which abolishes an existing cause of action brings the statute within the general proscription of rule three. [*Karl, supra* at 573; citation omitted.]

Section 2169 does not abolish, take away, or legally bar plaintiff's cause of action for medical malpractice resulting in the wrongful death of the decedent. Rather, the statutory amendment merely modifies the requirements attendant to properly qualifying a medical expert witness. Accordingly, the third rule would not bar retroactive application of the amended statute had the Legislature attempted to apply the amendments retroactively; however, we have determined that it did not. Therefore, we conclude that the Legislature's expression of intent that the statute not be retrospectively applied must control.

Our Supreme Court summarized the fourth rule as follows:

> The case law development of rule four establishes the corollary to the general proscription found in rule three. A remedial or procedural statute may operate retrospectively if it does not "take away vested rights". [*Karl*, *supra* at 575; citations omitted.]

The fourth rule of retroactivity is inapplicable because our Supreme Court has held that the statutory amendment is substantive in nature rather than procedural or remedial. In *McDougall v Schanz*, 461 Mich 15, 35, 37; 597 NW2d 148 (1999), our Supreme Court concluded that § 2169 "is an enactment of substantive law" rather than procedural law. The Court reasoned:

> [B]ecause the Legislature is authorized to change a common-law cause of action or abolish it altogether . . . it necessarily has the ability to "circumscrib[e] those qualified to give the requisite proofs to establish the elements of the cause of action. . . ." The applicable standard of care is an essential element in a medical malpractice action. . . . Section 2169 essentially modifies that element to require

> proof of malpractice "emanate from sources of reliable character as defined by the Legislature." [*McDougall, supra* at 36.]

In *Rookledge v Garwood*, 340 Mich 444, 453; 65 NW2d 785 (1954), our Supreme Court explained what was meant by a "remedial" statute:

> It is generally understood that if a statute or amendment is "*designed to correct an existing law*, redress an existing grievance, or introduce regulations conducive to the public good," it will be regarded as remedial in nature. . . . *The same connotation is given to those statutes or amendments which apply to procedural matters rather than to substantive rights.* The definitive rule in this respect, found in 50 Am Jur, pp 33, 34, Statutes, § 15, is:
>
> "Legislation which has been regarded as remedial in its nature includes statutes which abridge superfluities of former laws, remedying defects therein, or mischiefs thereof implying an intention to reform or extend existing rights, and having for their purpose the promotion of justice and the advancement of public welfare and of important and beneficial public objects, such as the protection of the health, morals, and safety of society, or of the public generally. *Another common use of the term 'remedial statute' is to distinguish it from a statute conferring a substantive right, and to apply it to acts relating to the remedy, to rules of practice or courses of procedure, or to the means employed to enforce a right or redress an injury.* It applies to a statute giving a party a remedy where he had none or a different one before." [Citation omitted; emphasis supplied.]

Given that our Supreme Court has characterized the statutory amendment of § 2169 as a matter of substantive law that modified the elements of medical malpractice, we find that the fourth rule of retroactivity does not support retrospective application of § 2169 to the period from October 1, 1993, to April 1, 1994.

Consideration of the four rules of retroactivity convinces us that the Legislature did not intend for the amended statute to be retroactively applicable to cases filed between October 1, 1993, and April 1, 1994. Accordingly, for the reasons discussed above, we conclude that the statute may not be applied retroactively to actions that were filed before its effective date of April 1, 1994.

Under the clear terms of the statute before its amendment, Dr. Brecher and Dr. Young were specialists in "a related, relevant area of medicine." The trial court therefore properly concluded that a sufficient foundation had been established to permit Dr. Brecher and Dr. Young to testify as experts regarding the standard of care for the recognition of bacterial contamination of donated blood, the transfusion of blood, and the appropriate procedures to be followed for diagnosing and treating infections.

For the same reasons as set forth above, we conclude that the amended version of MCL 600.2912a; MSA 27A.2912(1) does not apply retroactively to this case.[17]

We must still determine whether the trial court abused its discretion by concluding that plaintiff 's experts testified to appropriate standards of care. To the extent that this issue concerns the qualifications of plaintiff 's experts to testify concerning the applicable standard(s) of care, we must conclude under our prior decision in *Cox*, *supra*, that this issue has been forfeited. However, we also conclude that, with respect to the actual substantive testimony offered by plaintiff 's experts, defendant could properly raise an objection to the experts' testimony regarding the standard(s) of care during, or immediately before, their testimony.[18] We note that in *Cox* the defendant's objection to the testimony of the plaintiff 's experts was rejected by this Court largely because the defendant's own expert agreed with the plaintiff 's experts that the standard of care was a national standard, and because the defendant failed to offer any other proof from which the jury could have concluded that the standard of care was a local standard. *Id.* at 82-83. In this case, however, defendant did not agree that the standard of care was a national standard.

The question whether an expert's testimony established the proper standard of care (i.e., community or national) is a matter that is determined on the basis of the testimony offered by the

expert at trial. This Court has repeatedly emphasized the importance of preserving issues for appeal by objecting *at the time improper testimony is offered*. Cf. *Kubisz v Cadillac Gage Textron, Inc*, 236 Mich App 629, 640-641; 601 NW2d 160 (1999).[19] In any event, because we are reversing and remanding this case for a new trial, we will briefly address this claim to assist the trial court upon retrial.

In relevant part, § 2912a provides as follows:

> (1) Subject to subsection (2), in an action alleging malpractice, the plaintiff has the burden of proving that in light of the state of the art existing at the time of the alleged malpractice:
>
> (a) The defendant, if a general practitioner, failed to provide the plaintiff the recognized standard of acceptable professional practice or care in the community in which the defendant practices or in a similar community, and that as a proximate result of the defendant failing to provide that standard, the plaintiff suffered an injury.
>
> (b) The defendant, if a specialist, failed to provide the recognized standard of practice or care within that specialty as reasonably applied in light of the facilities available in the community or other facilities reasonably available under the circumstances, and as a proximate result of the defendant failing to provide that standard, the plaintiff suffered an injury.

In this case, Dr. Brecher testified that he was familiar with the "standard of care *in this country* for the provision of blood products in a hospital." (Emphasis supplied.) He also claimed to be familiar with the standard of care for *physicians and hospital staff* who treat a surgical patient. He finally testified that he was "familiar with the standard of care that is required of those other specialty groups, anesthesiologists, nurse anesthetists, surgeons and other personnel that handle blood in regard to the proper use and administration of blood products in a hospital." He testified regarding the "minimum standard of care" as follows:

> [I]f it is suspected that a patient is having a reaction to a unit of blood, of course, [the minimum standard of care] is to stop that unit of blood, take it down.

> In a case such as this where there was hypotension, disseminating intravascular coagulation and a very high fever, one might—one needs to think of principally two type reactions; one would be clinical sepsis, and the other would be a hemolytic transfusion reaction.
>
> The standard of care is to, at a minimum, work the patient up to see if they have had a hemolytic transfusion reaction. And if you suspect a septic reaction, to—treat that reaction. Some of those minimal standards are included in the circular information which is an FDA approved document now, which is a package insert for a pharmaceutical as well as in the AABB standards and in the AABB technical manual.

Dr. Brecher further testified that the standard of care for the inspection of blood before it was administered to a patient required that the unit of blood be visually inspected for any abnormal appearance before it was used for a transfusion; any abnormal blood should be examined further and discarded rather than being transfused.

Dr. Young was asked if he was "familiar with the standard of care or standard of practice of hospitals, physicians, and nursing staff in recognizing and treating infection." After stating that he was familiar with—but without describing—the standard, Dr. Young testified that there was a delay in diagnosing the decedent's septic condition, a delay in communicating the laboratory test results to the critical care unit, and a delay in administering antibiotics.[20] Dr. Young acknowledged that he was not an expert in anesthesiology, orthopedic surgery, or intensive care medicine.

Regardless of their qualifications to testify concerning the standard of care applicable to each medical professional who attended to the decedent, neither expert testified with specificity regarding the standard of care for each particular medical professional.[21] Thus, as defendant argues, the experts, in effect, testified to a "universal, national standard of care" to which all the medical professionals were required to adhere. Therefore, according to plaintiff's experts, each

medical professional who attended the decedent was required to adhere to not only the standard of care applicable to their profession, but also to the standards of care applicable to other medical specialties. For example, the nurse anesthetist and the medical technologist were required to visually inspect the donor blood for impurities or improper color, but so were the surgeons and nurses who operated on the decedent. Likewise, the attending physicians in the postoperative room were required to diagnose that the decedent was bleeding because he was either fighting an infection or having a transfusion reaction, but so were the nurse anesthetist and the attending nurses.[22] Accordingly, it was left to the jury to determine which standard of care was applicable to which medical professional—even where the standard was not described—and then to determine whether that particular standard of care was violated. The trial court therefore erred in failing to require that plaintiff's experts testify with specificity regarding the standard of care applicable to each medical professional whose failures of care allegedly constituted malpractice. At the retrial, the trial court should require plaintiff's experts to precisely identify the standard of care applicable to each medical professional that they claim provided substandard care. This will enable any medical experts that defendant chooses to present to address the testimony of plaintiff's experts with specificity,[23] and it will assist the jury to evaluate the testimony of all the expert witnesses without confusion concerning the applicable standard.

VII

Defendant next contends that the trial court committed error requiring reversal in refusing to instruct the jury pursuant to defendant's request for a modified version of SJI2d 30.01. We agree.

Defendant requested that the trial court instruct the jury using a modification of the standard instruction that required the jury to determine whether each individual category of specialist who attended the decedent had violated the standard of care applicable to their specialty. Plaintiff objected to this instruction, claiming that it was biased toward defendant. The trial court declined to give the requested modification, and instead instructed the jury using the standard jury instruction, SJI2d 30.01, as follows:

> When I use the words "professional negligence" or "malpractice" with respect to the defendant's conduct, I mean the failure to do something which a hospital's agents/servants/employees of ordinary learning, judgment or skill in this community or a similar one would do, or the doing of something which a hospital's agents/servants/employees of ordinary learning, judgment or skill would not do, under the same or similar circumstances you find to exist in this case.
>
> It is for you to decide, based upon the evidence, what the ordinary hospital's agents/servants/employees or [sic, of] ordinary learning, judgment or skill would do or would not do under the same or similar circumstances.[24]

In *Case v Consumers Power Co,* 463 Mich 1, 6; 615 NW2d 17 (2000), our Supreme Court recently stated that an appellate court

> review[s] claims of instructional error de novo. In doing so, we examine the jury instructions as a whole to determine whether there is error requiring reversal. *The instructions should include all the elements of the plaintiff's claims and should not omit material issues, defenses, or theories if the evidence supports them.* Instructions should not be extracted piecemeal to establish error. Even if somewhat imperfect, instructions do not create error requiring reversal if, on balance, the theories of the parties and the applicable law are adequately and fairly presented to the jury. We will only reverse for instructional error where failure to do so would be inconsistent with substantial justice. [Emphasis supplied; citations omitted.]

The unmodified standard instruction, under the circumstances of this case, was not specific enough; it permitted the jury to find that, for example, the nurse anesthetist violated the standard of care applicable to a critical care unit physician. The standard instruction is sufficient

to inform the jury of the definitions of "professional negligence" and "malpractice" in the ordinary case involving one or two named defendants. However, in this case plaintiff chose to bring suit against the hospital and its (unnamed) agents, servants, or employees. Thus, it was incumbent on the trial court to ensure that the jurors clearly understood how they were to determine whether any of defendant's employees committed professional negligence or malpractice under the particular standard of practice applicable to their specialty. The unmodified standard instruction did not fulfill that function.

In *Johnson v Corbet*, 423 Mich 304, 326-327; 377 NW2d 713 (1985), our Supreme Court stated:

> Merely because the evidence in a case may include the subject matter of an SJI, it does not mean that the court, upon request of counsel, is automatically required to read every SJI which might tangentially touch on the subject matter. The trial court's duty to determine the "applicability," under MCR 2.516, of a requested SJI runs deeper than that and calls for the exercise of discretion. It is conceivable, for example, that a given SJI would accurately state the law and be applicable, in the theoretical sense that the evidence in a case included reference to the subject matter of the SJI, but that a wise and experienced trial judge, in the exercise of informed discretion, would determine that reading the SJI would confuse the jurors or unnecessarily distract them from the material issues in the case, or extend the jury instruction process out of all proportion to the educational benefit to the jurors and fairness to the litigants, or unduly emphasize a potentially prejudicial aspect of the evidence, or simply add nothing to an otherwise balanced and fair jury charge nor enhance the ability of the jurors to decide the case intelligently, fairly, and impartially. This, of course, is a way of saying that it is for the trial court to determine when the SJI are applicable, not in an abstract or theoretical sense, but in the context of the "personality" of the particular case on trial, and with due regard for the adversaries' theories of the case and of counsel's legitimate desire to structure jury argument around anticipated jury instructions.

In this case, the trial court failed to properly exercise its discretion, pursuant to defendant's request, to modify the SJI to make it applicable to the "context of the 'personality' of the particular case on trial." *Id.* The "personality" of this case was that plaintiff had alleged

malpractice against defendant on the part of its unnamed, unspecified agents or employees. Different standards of practice were applicable to the various employees who were inferentially the subject of plaintiff's lawsuit. The trial court used a general instruction that failed to differentiate between the various standards of practice that were applicable to these employees. As a result, the instruction that was given provided little in the way of guidance for the jurors as they attempted to determine if any of defendant's agents or employees had violated the standard of care applicable to their own particular specialty.

Thus, when viewed in its entirety, the unmodified standard jury instruction omitted material issues, defenses, and theories of defendant. It was not specific enough to avoid juror confusion and to enhance their ability "to decide the case intelligently, fairly, and impartially." *Johnson, supra* at 327. At the new trial, upon request, the trial court should instruct the jury using a modification of SJI2d 30.01 that accurately delineates the standards of care applicable to the various medical personnel who plaintiff contends committed malpractice in their treatment of the decedent.

VIII

Defendant's penultimate issue concerns the retroactivity of the limitation on noneconomic damages contained in the amended version of MCL 600.1483(1); MSA 27A.1483(1) that was enacted as part of 1993 PA 78. Defendant contends that the trial court erred in determining that subsection 1483(1) was not retroactively applicable to this case, and, as a result, erred in refusing to reduce the jury's award of noneconomic damages to the statutory limit of $280,000. We disagree.

For the reasons given in our earlier discussion concerning the retroactivity of §§ 2169 and 2912a, we hold that the amendments of § 1483 are to be applied prospectively only from April 1, 1994, and not retroactively specifically for the six-month period from October 1, 1993, to April 1, 1994, and generally before October 1, 1993.[25]

The alleged malpractice in this case occurred on November 12 and 13—before the effective date of 1993 PA 78. Therefore we conclude that the statutory damage cap contained in MCL 600.1483(1); MSA 27A.1483(1) is not retroactively applicable to this case. It is therefore unnecessary to grant plaintiff's request to be allowed to file a supplemental brief arguing that retroactive application of the damage cap provision would violate her constitutional rights to a jury trial, to due process of law, and to equal protection.

IX

Finally, given that a new trial has been ordered, it is not necessary for this Court to decide whether the trial court abused its discretion by denying defendant's motion for remittitur.

Reversed and remanded for further proceedings in accordance with this opinion. We do not retain jurisdiction.

/s/ Donald S. Owens
/s/ Michael J. Kelly
/s/ Joel P. Hoekstra

[1] According to one of plaintiff's experts, DIC occurs when the body attempts to fight an invading germ by activating the clotting system. This reaction is thus thought of as one of the body's primitive defense mechanisms. As the blood clots, the body uses up certain clotting factors; therefore, DIC can be diagnosed by measuring the time it takes for a clot to form. DIC results in an elongation of the time that it takes to form a clot, a reduction in the amount of fibrinogen, an increase in the amount of used-up clotting materials, and a drop in the platelet count.

[2] The trial court mentioned only MCR 2.116(C)(10) when it ruled on the motions for summary disposition. On the basis of this reference and the fact that it appears that the trial court reviewed submitted materials beyond the pleadings, we assume that the trial court's ruling was based on (C)(10). *Krass v Tri-County Security, Inc*, 233 Mich App 661, 664-665; 593 NW2d 578 (1999).

[3] Contrary to plaintiff's assertion, the record demonstrates that defendant did move for a directed verdict based on the absence of any evidence or testimony in support of plaintiff's claim of malpractice alleging the failure of the hospital staff to monitor and record the decedent's temperature before, during, and after the operation. Defendant argued that plaintiff's experts had not testified that a failure to monitor or record a patient's temperature during hip replacement surgery was a violation of the standard of care or that such a failure was a proximate cause of the decedent's death.

[4] This points out a problem with Dr. Brecher's second "study" of the blood color change—it was conducted *after* the events in this case occurred. Therefore, it is difficult to see how the knowledge gleaned from the "study" could have been considered "recognized scientific knowledge" at the time of the decedent's death.

[5] A further problem with this second "study" is the fact that the sample size (two units) would appear to be too small for the results to be statistically significant.

[6] Defendant's expert, Dr. Saravolatz, subsequently testified that the decedent could not have survived once the infusion of contaminated blood occurred; however, since this testimony was introduced in defendant's case, it is not considered in determining whether the trial court should have granted defendant's motion for a directed verdict based on the evidence presented during plaintiff's case in chief. *Lamson, supra* at 455.

[7] In *McDougall v Schanz*, 461 Mich 15; 597 NW2d 148 (1999), our Supreme Court upheld the constitutionality of MCL 600.2169; MSA 27A.2169. The Supreme Court's decision in *McDougall* dealt with the preamendment statute, but the Court noted that its determination of constitutionality "applies with equal force to the 1993 version." *McDougall, supra* at 21, n 2. However, the *McDougall* decision did not consider whether the amended statute could be retrospectively applied to cases arising before the effective date of the amendment.

[8] Both § 2912a and § 2169 were part of the "package" of statutes that were amended by 1993 PA 78.

[9] Dr. Young was referenced in this motion only in a footnote that indicated that Dr. Young's contention that there was an unnecessary delay in the treatment of the decedent was not alleged as one of plaintiff's theories of malpractice; this contention was answered by the trial court's decision to permit plaintiff to amend her complaint.

[10] In fairness to defendant, we must note that in the motion for partial summary disposition, defendant contended that the standard of care testimony of plaintiff's experts should be excluded because the testimony did not relate to the theories of negligence pleaded by plaintiff. In response, plaintiff requested, and was allowed, to file an amended complaint that listed, with more specificity, the acts of malpractice plaintiff contended had occurred. That filing was accomplished on September 15, 1997, less than two weeks before trial. Moreover, we note that,

according to a notice sent by the trial court's research attorney to the parties on August 25, 1997, *the trial court* scheduled the hearing on the summary disposition motions and the motions in limine for the first day of trial.

[11] We note that the motion in limine sought to preclude Dr. Brecher from offering standard of care testimony on a variety of grounds, but not on the basis of his failure to qualify as a standard of care expert under the requirements of § 2912a.

[12] Dr. Brecher's and Dr. Young's testimony in plaintiff's case in chief consisted of their video-taped depositions.

[13] Before its amendment by 1993 PA 78, MCL 600.2169; MSA 27A.2169 provided, in relevant part:

> (1) In an action alleging medical malpractice, if the defendant is a specialist, a person shall not give expert testimony on the appropriate standard of care unless the person is or was a physician licensed to practice medicine or osteopathic medicine and surgery . . . in this or another state and meets both of the following criteria:
>
> (a) Specializes, or specialized at the time of the occurrence which is the basis for the action, in the same specialty or a related, relevant area of medicine or osteopathic medicine and surgery . . . as the specialist who is the defendant in the medical malpractice action.
>
> (b) Devotes, or devoted at the time of the occurrence which is the basis for the action, a substantial portion of his or her professional time to the active clinical practice of medicine or osteopathic medicine and surgery . . . or to the instruction of students in an accredited medical school . . . in the same specialty or a related, relevant area of health care as the specialist who is the defendant in the medical malpractice action.

The amendments contained in 1993 PA 78 rewrote the above sections as follows:

> (1) In an action alleging medical malpractice, a person shall not give expert testimony on the appropriate standard of practice or care unless the person is licensed as a health professional in this state or another state and meets the following criteria:
>
> (a) If the party against whom or on whose behalf the testimony is offered is a specialist, specializes at the time of the occurrence that is the basis for the action in the same specialty as the party against whom or on whose behalf the testimony is offered. However, if the party whom or on whose behalf the testimony is offered is a specialist who is board certified, the expert must be a specialist who is board certified in that specialty.
>
> (b) Subject to subdivision (c), during the year immediately preceding the date of the occurrence that is the basis for the claim or action, devoted a majority of his or her professional time to either or both of the following:
>
> (*i*) The active clinical practice of the same health profession in which the party against whom or on whose behalf the testimony is offered is licensed and, if the party is a specialist, the active clinical practice of that specialty.

(*ii*) 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 is licensed and, if the party is a specialist, an accredited health professional school or accredited residency or clinical research program in the same specialty.

(c) 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 claim or action, devoted a majority of his or her professional time to either or both of the following:

(*i*) Active clinical practice as a general practitioner.

(*ii*) 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 is licensed.

[14] As applicable to this case, MCL 600.2912a; MSA 27A.2912(1) remained substantially the same with regard to designating the applicable standard of practice or care for general practitioners and specialists.

[15] We deem it the better practice in such cases for the trial court, upon proper request, to require the plaintiff to indicate the person or persons against whom the claim(s) of malpractice are being made so as to insure that the expert witness testimony offered to establish the relevant standard of care properly meets the requirements of § 2169.

[16] Under the current statute, it appears that neither Dr. Brecher nor Dr. Young would be qualified to present standard of care testimony. See *Morinelli v Provident Life & Accident Co,* 242 Mich App 255, 266, n 5; 617 NW2d 777 (2000) (a doctor who was board certified in internal medicine and had received specialized training in area of diabetes was not qualified under MCL 600.2169[1][a]; MSA 27A.2169[1][a] to give standard of care testimony against a family practitioner whose practice included the treatment of diabetic patients). However, we have concluded that defendant forfeited any objection to the qualifications of plaintiff 's experts by failing to raise it within a reasonable time after learning the identity of those experts. *Greathouse, supra* at 231.

[17] The applicability of the amendments of § 2912a and subsection 1483(1) is determined by the date the cause of action arises, while the applicability of the amendments of § 2169 is determined by the date the case is filed. Compare 1993 PA 78, subsection 4(1) and (3).

[18] Defendant objected to the deposition testimony of each of plaintiff 's experts by filing a motion with the trial court and arguing the motion immediately before the presentation of the experts' video depositions. The trial court ruled that the objections were untimely, but nevertheless considered the objections raised by defendant and ruled that they were meritless. Because we are remanding this case for a new trial, and because the trial court considered and ruled on defendant's objections, we consider this issue on appeal.

[19] We recognize that in *Greathouse, supra,* and *Cox, supra,* this Court held that a party's failure to object to an expert witness' qualifications well in advance of trial constituted a forfeiture of the

right to appellate review of the claim that the expert was unqualified to testify concerning the standard of care. See discussion above. However, that issue is different from the question whether an otherwise qualified expert identifies an improper standard of care and testifies using that standard. Given the importance that appellate courts have attached to preserving claims of error by raising specific and timely objections in the trial court at or before the time that the objectionable testimony is presented, this Court is reluctant to extend the forfeiture rule of *Greathouse* and *Cox* beyond the specific context in which the rule was enunciated.

[20] Dr. Young opined that either during or after the surgery, the decedent should have been given two broad spectrum antibiotics. He further stated that although the nursing unit was notified of the laboratory results, those results were not communicated to the critical care physician in a timely manner. Finally, Dr. Young noted that although appropriate antibiotics were finally ordered during the evening, they were not administered until four to five hours later.

[21] For example, in *Whitney v Day*, 100 Mich App 707, 710-712; 300 NW2d 380 (1980), this Court held that a nurse anesthetist is held to the standard of care applicable to those who are engaged in the treatment of "the sick or wounded who are suffering in the same community."

[22] Dr. Young also testified, however, that he had no criticism of the surgeon for taking the decedent back into the operating room for further surgery to determine the cause of his continued bleeding.

[23] According to our opinion in *Cox, supra* at 82, a defendant may present proof in a separate record challenging the standard of care identified by a plaintiff 's expert.

[24] We note that, although plaintiff 's experts testified that a national standard of practice applied to the acts of the hospital staff, the instruction given by the trial court requires the jury to use the local standard "in this community." The failure to instruct the jury in accordance with the standard of practice established by the testimony may well have resulted in juror confusion.

[25] Our Supreme Court has noted that 1993 PA 78, subsection 4(1) provides that the act does not apply retroactively to causes of action that arose before October 1, 1993. *Weymers v Khera,* 454 Mich 639, 649; 563 NW2d 647 (1997). This observation is not dispositive of the retroactivity claim in this case. The malpractice in *Weymers* occurred in 1990 and the lawsuit was filed in 1991. *Id.* at 642-644. Thus, both the event and the lawsuit occurred long before the amendment of the statute. The *Weymers* case, unlike the case currently before the Court, did not involve a cause of action arising between October 1, 1993, and April 1, 1994. Nor did this case involve the applicability of the "lost opportunity" doctrine of *Falcon v Memorial Hosp,* 436 Mich 443; 462 NW2d 44 (1990), that was the subject of the *Weymers* decision.